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REPORT

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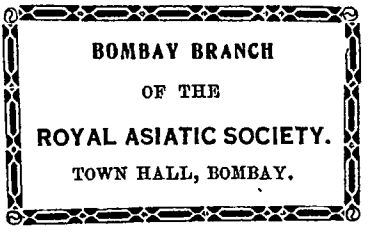

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Report

of the

Fact-Finding Committee (Handloom and Mills).

PRELIMINARY.

Terms of reference.—The Fact-Finding Committee (Handloom and Mills) was constituted by the Government of India in the Commerce Department Resolution No. 110-Ind. (16)/40, dated the 25th January 1941, which was issued in the following terms :—

"The problem of safeguarding the position of the handloom industry, and, at the same time, reconciling the conflicting interests of the handloom and mill industries has been under the consideration of the Government of India for the last few years, and has been raised more than once at the Industries Conferences. At a recent Handloom Conference held at New Delhi, on the 6th and 7th December 1940, the representatives of certain Provincial Governments, the Mill and the Handloom industries, who attended the Conference, were unanimous in recommending that a Fact-Finding Committee (Handloom and Mills) should be constituted immediately to investigate certain facts relating to the handloom and mill industries. This recommendation was placed before the Twelfth Industries Conference held at Lucknow on the 16th and 17th December 1940, which fully endorsed it. It has accordingly been decided to constitute a Fact-Finding Committee, with effect from the 15th January 1941, consisting of :—

Chairman :

Dr. P. J. Thomas, M.A., B.Litt., D. Phil. (Oxon.), *Professor of Economics, University of Madras.*

Member :

Rai Bahadur Hrishikesh Mookerjee, A.M.C.T. (*Manchester*), *Custom House, Calcutta.*

Secretary :

Mr. B. P. Adarkar, M.A. (Cantab.), *Reader in Economics, University of Allahabad.*

The headquarters of the Committee will be at New Delhi. The terms of reference of the Committee will be as follows :—

(1) To make a survey, with the assistance of Provincial and State Governments, of the extent of the handloom industry, in each Province and State, and of the kinds of handloom products produced and the number of persons engaged in the industry ;

(2) To make a report on the marketing organisation both for the purchase of yarn by the handloom weavers and for the sale of the handloom products ;

(3) To compare the nature of the products of the handloom industry in each area surveyed with the corresponding mill products and to find the nature of the competition between the two ;

(4) To investigate the kinds of yarn used in the handloom industry and types of production for which different kinds of yarn are used ; and

(5) In particular, to investigate how far an enactment prohibiting the mills from using yarns of low counts would help the handloom industry in maintaining its production."

2. *Methods of enquiry.*—The Committee assembled in New Delhi in the last week of January 1941. On the 27th January the Committee issued a Press Communique reproducing the terms of reference and inviting firms or persons interested in the enquiry to send their representations by the 20th February. The communique is reproduced in Appendix I. On the 7th February, a preliminary letter was addressed by the Committee to all Provincial Governments and States, requiring them to supply certain factual data for formulating the material on which the Committee's questionnaire could be based. This letter is reproduced as Appendix II. After many discussions with representatives of Provincial and State Governments, and of the handloom and mill industries, and others, the Committee issued their questionnaire on the 27th April 1941. (Appendix XXXH) Replies to the questionnaire were to be sent so as to reach the Secretary not later than 7th June 1941. As it was found that certain firms, associations and individuals and some of the Governments could not possibly send their replies before this date, extension of time was granted on application to those who required it. Apart from the general questionnaire, questions on special aspects of the problem were addressed to the Collectors of Customs and certain District Officers, economists and leading women in different parts of India. In Appendix III is given a list of Provincial and State Governments, millowners' associations and other commercial bodies, handloom weavers' associations and economists, officials and ladies, who sent in either replies to the questionnaire and special letters or notes or memoranda on matters connected therewith, or samples of cloth, to illustrate their views.

3. *Tour programme.*—The Committee undertook two main tour programmes: one the preliminary tour, and the other the main tour. The preliminary tour was undertaken with a view to obtaining a first-hand acquaintance of the problems of the handloom industry *vis-a-vis* the mill industry, prior to the issue of the questionnaire. The preliminary tour programme commenced on the 5th February 1941 and the Committee visited important handloom

centres, and Provincial and State capitals, as also leading centres of the mill industry. Lucknow, Patna, Calcutta, Nagpur, Hyderabad, Madras, Madura, Coimbatore, Salem, Cannanore, Bangalore, Sholapur, Bombay, Ahmedabad, Amritsar, Lahore and Multan were the principal places visited in this tour. The Committee returned to headquarters by the end of April and immediately thereafter issued their questionnaire. The principal tour commenced towards the end of May. This tour was undertaken in a more thorough-going manner and a good number of the important handloom centres in the country, both in the Provinces and in the States, were visited. But we omitted Sind and the North-West Frontier Province from our tour programme as there are not any large centres of hand-weaving in those areas. Pressure of time and financial considerations also prevented us from visiting the centres located in the States of Central India and the Rajputana Agency. The scattered nature of the handloom centres necessitated extensive travelling on the part of the Committee. Thus the Committee were in a position to study at first hand the conditions of the hand-weaving industry in most parts of India. The details of the two tour programmes will be found in Appendix IV.

4. *The Collection of Statistics.*—One of the principal tasks for the Committee was to find out the number of looms and weavers, and the total amount of cloth produced by them, classified under appropriate categories. If the Committee had proceeded to collect the information themselves, it would have proved a tremendous task and would have involved much time and cost. As the Hon'ble Sir A. Ramaswami Mudaliar pointed out at the Twelfth Industries Conference, "The work of the Committee would depend very largely for its success on the co-operation of the Provinces and the States..... But such a Committee working by itself and deprived of that co-operation could not fulfil its mission in ten years." Thus, a complete census of the handloom industry in its quantitative and qualitative aspects was out of the question. What was needed was adequate factual and statistical material for the formulation of policy. The Department of Industries and other agencies in the Provincial and State Governments have been maintaining statistics relating to the hand-weaving industry and some of them have carried out detailed surveys of the industry as is shown in Appendix VI. It must be admitted that all these surveys were not conducted on a uniform plan; nor does all the material gathered fit into the scheme adopted by the Committee. Therefore, at our instance, fresh enquiries were undertaken by the Provincial and State Governments so as to make the facts and figures up-to-date. We ourselves visited as many centres as possible to check up the data supplied and to supplement them by our personal investigations. Moreover, wherever possible, we have used independent material provided by existing statistical agencies, both Government and private. In spite of all this, we cannot claim that the statistics collected are without blemish. To obtain accurate statistics regarding an unorganised and widely scattered industry like handloom weaving is extremely difficult, and even the minutest survey may not give accurate results. But this defect, however serious from the academic point of view, is not so detrimental to the purpose for which this enquiry has been launched. On a subject like the total production of handloom cloth, accurate statistics would be of great value, but in this matter further investigation could not have been of any great avail, for the reason that the "residual" method adopted in estimating yarn consumption

necessitates the collection of data in respect of a number of small industries consuming yarn, and this would be beyond the capacities of any first-hand inventory. Moreover, there is a wide variety of conditions in the handloom industry in respect of types of looms and weavers, counts of yarn consumed, nature of the cloth produced and so forth. To cope with such a task an enormous amount of travelling will have to be done in order to study the varying aspects and peculiarities of each area. We feel, however, that the amount of touring actually put in by us has been adequate to the less ambitious and more practical task of obtaining the relevant portion of the information. It would have entailed not only heavy expenditure but also undesirable delay if any country-wide census of the handloom industry were taken.

5. *Acknowledgments.*—We wish to acknowledge the valuable assistance we have received from the officers of the Department of Industries and Co-operation of the Provincial and State Governments. We are also thankful to the Collectors of Customs, the Director-General of Commercial Intelligence and Statistics, and the many Collectors and other District Officers who have in one way or other assisted our work. The Millowners' Associations as also other commercial bodies, and various handloom weavers' organisations all over the country, placed useful information at our disposal and our indebtedness to them is heavy. Not only millowners and handloom weavers but members of the public came forward to help us in several places and we take this opportunity to express our gratitude to them.

Finally our thanks are due to our Secretary and Staff. Mr. B. P. Adarkar Secretary to the Committee, has been very helpful to us in the preparation of the Report and we are grateful to him for his valuable assistance. On our staff fell the heavy task of arrangement and analysis of a large and diverse mass of material collected during our enquiry, and they undertook this work with great ability and thoroughness. We are thankful to them all, and in particular to Mr. S. K. Mukherjee, the Head Assistant, whose long experience with successive Tariff Boards stood him in good stead in arranging for the extensive tours we had to undertake in the interior of the country.

CHAPTER I.

Recent Developments in the Hand-weaving Industry.

6. *The old hand-weaving industry.*—India has been a producer of cotton cloth from time immemorial and is generally regarded as the birth-place of cotton manufacture. The " marvellously woven tissues and sumptuously inwrought apparel " of ancient India were not only used in this country but they found their way into Egypt, Greece and Rome, in the heyday of their glory. In ancient Rome, according to all accounts, Indian muslins and chintzes were the rage of fashionable women. Yarn of very high counts was then in use and it is a marvel how such fine yarn was spun by hand in those days. The principal centres of this industry then were Dacca, Masulipatam and Paithan, noted respectively for muslins, chintzes and *pitambars*. India's exports of textiles to the western world continued during the Middle Ages and up to about the middle of the 19th century. With the invention in England of the spinning-jenny, the cost of spinning was incredibly cheapened ; the introduction of the powerloom cheapened weaving costs also. As a result of such technical advance, India not only ceased to export but began to import cotton textiles in large quantities. The second quarter of the 19th century witnessed this remarkable transformation, and the exports of cotton piece-goods which stood at Rs. 165 lakhs in 1816-17 declined to Rs. 8 lakhs by 1830-31, whereas during the same period imports of cotton yarn and piecegoods rose from Rs. 3 lakhs to Rs. 60 lakhs.

Much has been written on the decline of the Indian handloom industry during the 19th century. It is not our intention to dwell upon that well-worn theme. Nor do we intend to enter into an elaborate discussion of the causes which led to the collapse of the Indian cotton manufacture. Suffice it to say that this decline was not due entirely to the competition of cheap mill-made goods imported into the country. In most of its noted centres the industry flourished under court patronage, and when this patronage declined the industry also followed suit. The decline was due to many other causes. A drastic change in the dressing habits of the upper classes, the incapacity of the industry to adapt itself to modern requirements, and the prevalence of a demoralising system of middlemen were also important causes of the decline. In spite of all this, however, a large internal market was still available for the handloom industry. Not till the great changes in transport, including the opening of the Suez Canal and construction of the network of railways, did the internal market feel the impact of foreign imports in full measure. No doubt in parts of the country (*e.g.*, Bengal and the Malabar Coast) where, formerly as now, both men and women wore mostly plain white clothing, mill-made goods gained an easy ascendancy and weavers lost their occupation, but in a large part of India, women in particular stuck firmly to multi-coloured and artistic fabrics, which the mills could not make economically. But the general trend was one of decline and only a small part of the home market in textiles remained to the handloom. Large numbers of weavers had to abandon their hereditary occupation and a good proportion of them seem to have taken to agriculture. This decline of hand-weaving also led

to a further consequence. Hand-spinning provided a subsidiary occupation to the agricultural masses up till then, but as the very basis of this was attacked by competition of foreign fabrics, hand-spinning also declined, causing much unemployment amongst them. Further, the large and growing imports of mill-spun yarn aggravated the trouble, and hand-spinning practically disappeared as an occupation. All this increased the pressure on land, and this is generally considered to be one of the causes of the frequent visitations of famine in the 19th century.

7. *The new hand-weaving industry.*—Over a large part of the country, however, handloom weavers gradually learnt to adjust themselves to the changing circumstances, and adapted their looms to the use of mill-spun yarn. Thus while the old hand-weaving industry depending on hand-made yarn succumbed before the onslaught of the foreign mill competition, there arose a new hand-weaving industry, which no longer depended on the rather uncertain supplies of rough hand-spun yarn. This new industry used mill-spun yarn, which could be had in ample quantities and in suitable qualities as regards twist, strength and fineness. The price of mill yarn was also more reasonable. Dacca was one of the few old centres which readily adjusted themselves. It began to produce its muslins and *jamdani* saris with the imported high-count yarn. In the beginning nearly all the mill-spun yarn came from Manchester, and the growth of these yarn imports from year to year was an index of the growing size of this new industry. In 1850, yarn valued at only £1 million was imported, but by 1895, these imports exceeded £3 millions. From that date these imports began to decline. Yarn production in the Indian mills had been growing and handlooms came to depend more and more on Indian mill yarn. Yarn imports still continued, but the bulk was yarn of high counts. The dependence on mill-made yarn necessitated a change in the status of the weaver and in the organisation of the industry as a whole. Hitherto, the daily yarn supply of the weaver had come either from his own household or his immediate neighbourhood, but when yarn came from a distance and had to be bought, yarn-dealers and financiers became necessary, and as the average weaver had little credit, the industry fell more and more into the grip of middlemen. Thus the independence of most weavers disappeared and the great majority of them came to work for a mahajan either on the contract or on the wage basis. Technical improvements were also introduced during this period, largely owing to the initiative of European missionaries working in Southern India and Bengal. The Christian missionaries working on the West Coast of Southern India set up small handloom factories in Mangalore, Cannanore and Calicut. They introduced the fly-shuttle loom and made experiments in dyeing. The missionaries at Serampore (Bengal) were also keen on encouraging handloom weaving. At a later stage, handloom factories were set up in Salem, Sholapur and other places.

8. *Markets of the hand-weaving industry.*—This readjustment of the hand-weaving industry enabled it not only to survive but also to maintain, and even to extend, its markets. The imports of cotton piecegoods increased rapidly after 1850; large quantities of coatings and shirtings were brought in, and these catered for the needs mostly of urban classes who had taken wholly or partly to western modes of dress and house-furnishing. Mill-made dhotis were also imported, and owing to their cheapness they became popular not only in urban but in rural areas also. But the extensive field of *zenana* or women's

clothing (saris, and *khans* or bodice cloth) lay outside the purview of the import trade. It is true that numerous bales of cheap white and printed saris were brought into the country and were used in some places, but such saris never came into fashion among the middle or upper classes. The women of Bengal thought it improper to adorn themselves with anything other than the light and elegant saris of Dacca, Santipur, or Tangail; the women of Bombay were amply satisfied with the saris and *khans* made in Ilkal, Poona or Sholapur, and the rather conservative women of Madras could not even dream of wearing anything but the durable though heavy saris from Kornad, Uppada or Dharmavaram. Especially, for marriage and other ceremonial occasions, well-to-do classes everywhere in India used only *swadeshi* clothes. The elegant silk saris from Benares were, and still continue to be, sought by fashionable women everywhere in India, and even in the distant South no bride from a well-to-do family enters into wedlock without wearing one of them. The innate conservatism of Indian women has thus been the greatest bulwark of the handloom industry. Even in regard to men's wear, the handloom still claimed a large field. In most areas, cheap imported dhotis came into vogue, but the more expensive dhotis and *angavastrams* required for ceremonial purposes continued to be the exclusive monopoly of the handloom, and for common wear also, a certain proportion of the rural population generally preferred the hand-made fabric. Hence the survival of *dhoti* manufacture in Salem, Madura and Umrer. The demand for *lungis*, *kailis* and Madras handkerchiefs also continued almost intact, in spite of some rather ineffective mill competition in those lines. Most men in those days wore an upper cloth and a turban of some kind or other, and many flourishing centres specialized in making them.

9. *Handlooms and Mills (1896-1914).*—There was not for a long time any serious competition between the Indian mills and handlooms; rather the relationship between them then was complementary. The first Indian mill was established in 1851, and by 1900, there were 193 mills with nearly five million spindles; but the number of looms were only 40,124. Evidently Indian mills at first concentrated on the supply of yarn and this was a help to the handloom. Soon they began to supply nearly all the coarse yarn required by the handloom industry. By the close of the 19th century, foreign imports of yarn became stationary, but the Indian mill production increased by leaps and bounds. The table on the next page will bring out this trend of development.

It may also be seen from the table that for a long time the greater part of the yarn produced in the Indian Mills was either sold to the handlooms, or exported (mainly to China), and that only a small part was woven in the mills. During the period 1896-97 to 1900-01, while the Indian mills used 421 million lbs. of yarn, as much as 1,003 million lbs. (*i.e.*, nearly 2½ times) went to the handlooms.

It must be noted that this period was one of severe famines. In times of famine, weavers all over the country suffered intensely because of the sudden collapse of the demand for cloth. Special provision was, therefore, made for famine relief among weavers, during the famine of the late nineties. In spite of such adverse circumstances the hand-weaver was able to maintain his production and even expand it. Early in the present century, the industry entered on a period of prosperity. The consumption of yarn by the handlooms

TABLE I.—*Cotton yarn available for consumption in India.*

Year.	(In millions lbs.) Net imports of foreign yarn.	Indian mill production of yarn.	Yarn consumed by the mills.	Indian yarn exported.	Yarn available to handlooms (imports and mill production).
1	2	3	4	5	6
1896-97 . . .	50	423	74	96	185
1897-98 . . .	58	462	81	200	220
1898-99 . . .	46	512	91	220	226
1899-00 . . .	43	514	87	244	210
1900-01 . . .	35	353	88	122	162
1901-02 . . .	38	573	106	278	207
1902-03 . . .	34	576	109	255	226
1903-04 . . .	28	579	122	260	206
1904-05 . . .	31	578	139	256	234
1905-06 . . .	46	681	144	305	259
1906-07 . . .	38	654	147	251	275
1907-08 . . .	37	638	168	223	263
1908-09 . . .	42	657	171	242	267
1909-10 . . .	40	627	203	234	212
1910-11 . . .	33	610	217	191	218
1911-12 . . .	42	625	237	161	250
1912-13 . . .	50	688	253	215	237
1913-14 . . .	44	682	243	207	258

N.B.—The figures for "yarn consumed by the mills" [Col. 4] and "yarn available to handlooms" [Col. 6] have been taken from tables prepared by us according to methods explained in Chapter IV and Appendices VII to XXI. Reference may also be made to relevant tables there. For the years 1896-97 to 1899-1900, the same methods have been used, assuming that the allowance for yarn consumed by the two Groups is the same as in 1900-01, *i.e.*, 11 million lbs.

increased by nearly 24 per cent between the quinquennia 1896-1901 and 1911-16. Other evidence drawn from Provincial accounts also points to the same conclusion. During this period, Dacca and Santipur in Bengal, Sholapur, Ilkal and Ahmedabad in Bombay, Paithan in Hyderabad, Burhanpur in the Central Provinces and Berar, and Salem, Madura, Conjevaram, Coimbatore, Uppada and Dharmavaram in Madras, seemed to have flourished as a result of the wide demand for their products.

Various circumstances helped the progress of handloom weaving in that period. Firstly, the fiscal policy of the time positively favoured the hand-loom. There was an import duty of 3½ per cent on imports of mill-cloth coupled

with a countervailing excise duty of 3½ per cent on Indian mill-made cloth which was first imposed in 1896. Further, there was then no import duty on yarn. Although the protective effect of the 3½ per cent import duty was nullified so far as the Indian mill industry was concerned by the countervailing excise duty on mill cloth, the handloom still enjoyed the protection afforded by it and the hand-weaver obtained something like a preferential treatment. Secondly, the handloom industry was also helped by the *Swadeshi* movement which was started in the nineties by the Indian nationalists as a political measure, and which was later on adopted with greater enthusiasm by the Indian National Congress as a protest against the partition of Bengal. The mills perhaps profited more by this but handlooms also received some benefit. Thirdly, the policy of replacing throw-shuttle looms by the fly-shuttle pursued by the Provincial Governments had also its effects in adding to the efficiency of production. In Madras Presidency, such action began as early as 1900 and by 1912 there were nearly 10,000 fly-shuttle looms. The continued prosperity of the handloom industry during this period was the cumulative result of all these influences.

10. *Effects of the War, 1914-18.*—The real weakness of the position in regard to the handlooms was the unsteadiness of the supply of yarn in abnormal times. For nearly the whole of its yarn supply, the handloom under the new dispensation came to depend on mills, both home and foreign. This resulted in the handloom sharing in the ups and downs of the mill industry to a considerable extent. The dangers of this dependence were disclosed for the first time (and we fear, not for the last) during the War of 1914-18. Imports of cloth having diminished and the internal demand for cloth having increased, Indian mills used up much more of their yarn themselves and left much less for the handloom. Of the total yarn available in the quinquennium 1911-12 to 1915-16, mills took only 1,297 million lbs., while 1,248 million lbs. went to the handlooms; but in the next quinquennium, 1916-17 to 1920-21, of the total yarn available mills took as much as 1,644 million lbs., while only 1,097 million lbs. went to the handlooms. The result of this can be seen from the following table:—

TABLE II.—*Production of mills and handlooms 1914-15 to 1919-20.*

Year.	Mill consumption of yarn (in million lbs.).	Estimated mill production of cloth (in million yards).	Estimated handloom consumption of yarn (in million lbs.).	Estimated handloom production of cloth (in million yards).
1914-15 . .	246	1,176	272	1,088
1915-16 . .	313	1,496	236	945
1916-17 . .	336	1,606	149	598
1917-18 . .	338	1,616	185	741
9181-19 . .	310	1,482	224	894
1919-20 . .	341	1,630	127	506

Thus the estimated production of handloom cloth fell from 1,088 million yards in 1914-15 to 598 and 741 million yards in 1916-17 and 1917-18, and further to 506 million yards in 1919-20. Till 1910-11, the annual handloom production had been more than the mill production and in some years nearly double. But from that date mill production began to increase steadily and rapidly, and in the years 1911-12 to 1914-15 both lines of production became nearly equal. Then came the war, and taking advantage of the cessation of imports the mills made a serious effort to increase production and capture the home market. As Mr. R. D. Bell puts it, "the handlooms were finally beaten, and not only beaten but probably severly crippled for the time being."

Although the total handloom output had a setback in the period, the condition of the industry was in other ways not so discouraging. The diminution of imports during the war and the preoccupation of the Indian mills with war supplies with little possibility of adding to mill machinery enabled the handloom industry not only to maintain but to expand its production especially in the field of women's garments. Sholapur, Malegaon, and certain other centres in the Bombay Presidency benefited by this. During the same period, Cannanore witnessed a rapid expansion of hand-weaving and the number of looms increased. However, this revival of prosperity was not shared by many centres. When the prices of fabrics rose, wages also rose, although not correspondingly, owing to the inevitable time-lag. But, the scarcity and high prices of yarn was a great handicap to the weavers who had managed to keep their independence, and led large numbers of them to take up contract work under mahajans, or to work as labourers in the *karkhanas*. In certain centres like Malegaon, on the other hand, the failure of the karkhanadars to raise wages seems to have led to a disruption of the system. The scarcity and dearness of dyes also affected the handloom industry during the war of 1914-18. The net imports of dyes fell from a pre-war quinquennial average of over 15 million lbs. to 0·7 million lbs. in 1915-16 and 1·3 million lbs. on the average, during the following three years. During the same period the prices of dyes rose from about Re. 0-10-0 per lb. to Rs. 6-0-0 per lb.,—a nine-fold increase. The difficulty of securing dyes no doubt cut at the very root of the handloom industry which depends upon the production of coloured goods (including saris, *kailis* and *lungis*) to a far greater extent than the mills.

11. *Post-war developments.*—In the years following the war of 1914-18, the handloom was able to obtain yarn more adequately and there was a partial revival in the industry, judging from the increased quantities of yarn that went to it from year to year. Although the mills made some advance during the war, their progress in the early twenties was hampered by various impediments; some mills failed in Bombay and there were prolonged labour troubles in others. The cotton mill industry, especially in Bombay passed through a depression which was aggravated by currency difficulties and external competition. Progress in weaving was slow and, therefore, the handloom industry continued as formerly to maintain its market especially in women's garments. Taking advantage of the cheap and brilliant dyes imported from Germany since 1922, several centres in Madras, Bombay and Bengal, including Madura, Coimbatore, Sholapur, Malegaon, Dhanyakali, and Madhobdi, took to the production of elegant multi-coloured saris of the kind which the younger womenfolk were beginning to prefer. About this time, most Provinces under the influence of the newly established Departments

of Industries, made active efforts for the wider use of the fly-shuttle loom, and as a result of this a large proportion of the weavers of all provinces increased their efficiency. Technical improvements were also introduced in the winding and warping processes. The introduction of these improvements cheapened production to some extent and also led to the increase of output. On account of all these influences, the total production of the hand-weaving industry increased steadily. From the war average of 853 million yards per annum, it rose to 1,084 million yards in 1922-23.

But such favourable conditions did not last long, and soon various economic, political and social influences of a rather unfavourable kind came into operation. Under these influences, Indian mills made a rapid stride forward and the handlooms were left behind.

Owing to external competition in high and medium counts, the mills turned their eyes to the prospective field of women's cloth about the year 1925. Mills in Bombay, Sholapur, Amalner, and Dhulia took this up. Ahmedabad was slow in the beginning, but eventually came to lead in sari production. The manufacture of drills and jeans, long-cloth and shirtings also made progress. Imports tried to recover lost ground after the war, and partially succeeded for a time, but under various political and economic influences they gradually tapered off. The ground thus lost by the imports was captured by the Indian mills.

From 1926 the mills made rapid strides forward, thanks partly to the protective tariff and to various political and social influences. While the imports fell from 3,197 million yards in 1913-14 to 1,564 million yards by 1925-26, and further to 591 million yards by 1937-38, mill production in India rose from 1,171 million yards in 1913-14 to 1,965 million yards by 1925-26 and to 3,662 million yards by 1937-38. Meanwhile, the handlooms, after having enjoyed a spurt in the post-war years, continued in a stationary condition, now rising a hundred or two hundred million yards now falling back to old levels. The following table is instructive :—

TABLE III.—*The progress of the mill and handloom industries during 1920-39.*

Year.	(In million yards.)	
	Mill production.*	Handloom production.
1920-21	1,503·1	931·2
1921-22	1,716·0	938·0
1922-23	1,720·8	1,084·0
1923-24	1,696·9	816·8
1924-25	1,935·9	1,010·8
1925-26	1,964·6	888·4
1926-27	2,265·7	1,216·8

* For explanation of the figures, see Chapter III and Appendices XVI onwards.

TABLE III—*contd.*

Year.	(In million yards.) Mill production.*	Handloom production.
1927-28	2,370·9	1,210·8
1928-29	1,859·4	973·2
1929-30	2,356·5	1,282·4
1930-31	2,480·8	1,257·2
1931-32	2,872·8	1,332·4
1932-33	2,982·7	1,519·2
1933-34	2,767·6	1,262·0
1934-35	3,135·7	1,255·6
1935-36	3,240·8	1,450·4
1936-37	3,322·1	1,265·2
1937-38	3,661·5	1,293·2
1938-39	3,905·3	1,703·2

*For explanation of the figures, see Chapter III and Appendices XVI onwards.

We will now trace the various influences which affected the fortunes of the mill and handloom industries during the period. The chief of them were the tariff policy of the Government, the *Khaddar* movement in the country, and changes in the clothing habits of the people. All these three factors had a potent influence on the textile developments during the period.

12. *Tariff policy.*—From 1896, the import duty on cotton piecegoods was 3½ per cent *ad valorem*, but as there was a countervailing excise duty to offset this advantage, the duty had no protective effect. In 1917, as a war measure the import duty was raised to 7½ per cent, and coupled with the transport difficulties this had a powerful protective effect, as can be seen from the mill production figures. The position was further improved by the enhancement of the duty to 11 per cent in 1921 and 15 per cent in 1930, and by the removal of the excise duty in 1926. Between 1930 and 1931, the duty on British plain greys was increased to 25 per cent or 4½ annas per lb. At the same time, the duty on foreign plain greys was raised from 20 per cent or 3½ annas to 75 per cent or 6¾ annas in 1933. By 1934, there was further classification and the duties on cotton piecegoods imported from the United Kingdom stood at 25 per cent or 4½ annas, and on those imported from foreign countries, at between 35 and 50 per cent or 5¼ annas. Thus, within a short time, the Government of India raised a rather high tariff wall to protect the cotton textile industry, and although it has been slightly lowered since, the tariff still ranges from 12½ per cent to 15 per cent or 2¾ annas on British piecegoods, and 50 per cent or 5¼ annas on foreign.

At the same time, an import duty on yarn was also imposed. In 1922, a duty of 5 per cent *ad valorem* was levied and in 1927, a duty of 1½ annas per lb. was imposed as an alternative. The import duty was enhanced in 1931 to 6¼ per cent or 1⅞ annas per lb. In 1934, the duty on British yarn of counts 50s and below was lowered to 5 per cent or 1¼ annas. On counts above 50s, British yarn paid 5 per cent and foreign yarn 6¼ per cent. These duties are o be in operation till 31st March 1942.

The effect of protective and other duties on cloth production in Indian mills can be studied from Table III. The production of cotton cloth in the mills rose from 1,563 million yards in 1920-21 to 3,662 million yards in 1937-38, an increase of 135 per cent.

It has been claimed that the Government's tariff policy benefited the handlooms as well. For instance, the Millowners' Association, Bombay, in their written memorandum submitted to us, say that "the protective measures adopted by the Central Government benefited the hand-weaving industry equally with the mill industry." Our findings do not support this conclusion. Judged by the test of production, the effect on the handloom industry has not been perceptible, as can be seen clearly from Table III. According to our computation, handloom production increased only by 39 per cent from 1920-21 to 1937-38, the period during which the mills made rapid strides. In calculating the percentage increase in the production of handloom fabrics in recent years, we purposely leave out the year 1938-39, because that year is a freak year, and the high figure arrived at for it is not reliable for reasons which are explained later on. Moreover, even the 52 per cent increase gives a partial, if not altogether wrong, idea about the condition of the handloom industry, as will be shown in Chapter X.

We will now take the different parts of the tariff policy and see how each affected the hand-weaving industry. The removal of the 3½ per cent excise duty in 1926 created an immediate handicap to the hand-weavers. Not that the hand-weaving industry had any moral claim to the continuance of the excise duty; for it was not conceived as a measure of protection to the handloom, and whatever benefit the handloom received was incidental. Nevertheless, it has to be admitted that while the mills got an immediate relief by the removal of this duty, the handlooms received a setback.

The import duties on piecegoods were intended primarily to protect the mills, and this intention was adequately fulfilled. Owing to various causes, the duties did not raise prices appreciably, but at any rate they were helpful in maintaining a level of prices higher than would have been possible without them. But it does not appear that such benefits were extended to the kinds of goods which the handlooms were making. We have not got sufficient data for going fully into this question. The Tariff Board write in their Report on the Cotton Industry in 1932 (p. 167):— "It may be true," that the mills, for whose assistance the duties were designed, have benefited more from them (than the handlooms) and therefore have become better able to fight the handloom industry; but if the mills have been strengthened for attack, the handweaver has been strengthened for defence." Subsequent experience, however, has not shown that the handloom industry has been very much strengthened for defence. The Registrar of Co-operative Societies, Bengal, wrote to the

Special Tariff Board on the Cotton Industry (1935) that " under the protection of the duties, the Indian mills have taken to fine weaving and dumped the markets of Bengal with similar class of fine goods which were formerly produced by the handloom weavers alone " (p. 106). The duties thus seem to have strengthened the mills not only against the foreign mills but also against the indigenous handloom industry.

If the import duties on piecegoods were of doubtful value to the handlooms, the duty on yarn placed a definite burden on them, in the interests of the spinning industry. It was intended to keep out foreign yarn and give a fillip to spinning in India, but as the handlooms consume the great bulk of the imported yarn, the burden of the duty fell on them. It is true that owing to exchange depreciation and other causes, yarn prices subsequently fell and thus to some extent counteracted the rise in prices resulting from the duty, but the point is that for a time, at any rate, the hand-weaver had to buy his raw material at a higher price than he would otherwise have had to. Especially as the imposition of this duty came soon after the removal of the cotton excise duty, the hand-weaving industry got an immediate setback. The Tariff Board of 1936 was, therefore, right in its conclusion that the " Indian mill section of the industry has been placed in a better position to compete against the handloom industry which is definitely handicapped by the tariff on yarn, especially those required by the production of cloth with finer counts."

It must be admitted that the protective duty on yarn has strengthened the Indian textile industry by diminishing its dependence on foreign yarn imports. Largely as a result of the protective policy, Indian mills have increased their production of yarn, especially of higher counts. The following table will make this clear :—

TABLE IV.—*The production of yarn in Indian mills.*

Counts of yarn.	Quantity (in million lbs.) 1924-25.	Percentage.	Quantity (in million lbs.) 1939-40.	Percentage.
1—20	469·8	65·3	668·6	54·9
21—30	223·8	31·2	310·8	25·5
31—40	19·3	2·7	157·1	12·9
Above 40	5·8	0·8	81·8	6·7
TOTAL .	718·7	100·0	1,218·3	100·0

It is patent from the above table that since the imposition of the yarn duty the mill production of finer yarns had a large increase. Production of yarns of counts between 31s and 40s increased eight-fold between 1924-25 and 1939-40 and that of yarns of counts above 40s increased fourteen-fold. It has already been pointed out that such striking progress in the spinning of high-count yarn has given great support to the handloom industry in that dependence upon foreign imports has been reduced. On the other hand, it may be argued with greater cogency that such increase in mill production armed the mills to compete with the handlooms more effectively, for it

was with such yarn that Ahmedabad, in particular, put into the market saris which displaced those of Santipur, Madura and other well-known centres.

13. *The Khaddar Movement.*—Another influence of a political origin which affected the growth of the textile industries at this time was the hand-spinning movement sponsored by the Indian National Congress. This movement differed from the earlier *Swadeshi* movement, to which reference has already been made, in that on this occasion a great emphasis was laid on hand-spinning as well as on the use of Indian mill-made yarn. Both the first and the second Non-co-operation movements embraced *Swadeshi* as an important plank of their programme. Boycott of foreign goods was the negative, and the use of Indian goods was the positive, feature of *Swadeshi*, and necessarily the imports most affected by the movement were cotton textile goods from Britain. The *Swadeshi* movement, coming as it did at the same time as the fiscal protection of cotton textiles, proved a great blessing to the mill industry, and, to a large extent, enabled it to withstand the effects of the general trade depression of 1929-33, and to fill the vacuum created in the Indian market by the dwindling foreign imports. It is true that the handloom benefited in a general way by this latter phase of the *Swadeshi* movement, but the result was quite different in regard to the handlooms weaving fine saris with imported yarn. The handlooms had then a monopoly in finer saris and dhotis, but it was well-known that those were made with imported yarn, and, therefore, when the Congress ban on imported yarn was imposed, the public became reluctant to buy such cloth, and hand-weavers in certain important centres in Bengal and elsewhere were consequently faced with a serious situation. On top of this, certain importers are believed to have utilised the opportunity to put into the market high-count cloth with the names of fictitious Indian mills, and with such slogans as " Made out of yarn spun in our own Mills " stamped on them in the Indian languages. It is also said that some of the Indian mills, which had no spinning plant at that time continued to produce finer cloths out of imported yarns and that they also sold such cloths with fictitious labels. In this way, a few mills came to produce certain types of fine dhotis and saris which till then were only made on the handloom. Taking advantage of this opportunity, some enterprising financiers set up spindles for spinning finer counts in India, and thus by 1930 Indian mills were able to make fine saris and dhotis with high-count yarns made in India.

Again, in 1931, the Congress introduced the policy of certification in favour of a number of mills which agreed to certain conditions imposed by it in regard to the use of yarns. Unfortunately for the handloom weavers, this certification could not be extended to them owing to a number of practical difficulties. The net result was that the handloom weavers lost their long-established custom as they could not prove that their goods were made out of yarn spun in India. This agitation later subsided and the handloom weavers were able to make finer qualities of dhotis and saris out of Indian mill-spun yarn ; but, in the meantime, the mills were able to introduce into the market a new type of goods with attractive colours, elegant designs and borders and superior finish, at cheaper prices. The consumers were attracted by these, partly by their elegance and cheapness and partly by the belief that the mill goods were real *Swadeshi* while the handloom goods were not. In this way, hand-weavers in Santipur and several other hand-weaving centres were

deprived of the markets which they had enjoyed for long. The Tariff Board (1932) observes: "The strong prejudice fostered against the use of imported yarn has in various parts of the country prevented the handloom weaver from finding a sale for cloth of finer counts woven by him, and this has happened at a time when as the result of the protective duty on yarn his cost of material relatively to cloth has been considerably increased" (p. 175). Mr. Kasturbhai Lalbhai of Ahmedabad, giving evidence before the Tariff Board in 1932, stated that the ills of the handloom weavers were not due so much to the import duty on yarn as to the "great *Swadeshi* movement which has come over the country and which hampers him from marketing his goods made from the imported yarn" (Evidence, Vol. IV, p. 103).

It is but fair to state, however, that a larger section of the hand-weaving industry using low-count yarns did not come under such a handicap, and perhaps it shared to some extent in the benefits resulting from the *Swadeshi* movement. For instance, the hand-weavers who made shirtings and coatings, as in Cannanore, definitely gained by it. Similarly, the restriction imposed upon mills regarding the manufacture of *khaddar* cloth curtailed its production in mills, and to that extent handlooms weaving hand-spun yarn were benefited. It is also true that the *Swadeshi* spirit had a general beneficial effect on handlooms as on all Indian manufacturing concerns generally. In the first flush of enthusiasm handloom factories were set up in certain centres, but when the initial impulse vanished some of the concerns found themselves helpless against mill competition and collapsed.

14. *Changes in clothing habits.*—Meanwhile important changes had been taking place in the clothes and dressing habits of the people, and these helped the mills greatly in expanding their markets. In general, the change has been towards simplicity and plainness of attire.

The older *bhadralog* classes of the country delighted to wear costly and elaborate clothes, but the modern country magnates and town bourgeoisie have adopted a completely different outlook, due largely to the infiltration of Western ideas and, paradoxical as it might appear, to the advance of the national spirit. The results of this change of outlook have manifested themselves visibly in the clothes of men, women and children all over the country

In Southern India, formerly Hindu women of the upper classes generally wore tastefully coloured woven saris made in Kornad or Salem, Uppada or Dharmavaram, and they were generally 9 yards long. They were rather heavy and not too convenient to wear in warm weather, but they were ordained by long-established custom and hallowed by hoary associations. But all this has changed, owing to a growing distaste for ornamented clothing and elaborate colouring, and a preference for simple attire. The younger women have been taking to cheaper cotton saris of white or light colours, mostly mill-made and six yards long. Perhaps this change came about largely through the influence of school and college. A preference for wearing laundered clothing has grown among the womenfolk, and this has put a premium on mill cloth. Similar changes took place about the same time in Western India where the heavy and costly *Paithanis* and the Ilkal saris of traditional design went out of fashion and thin, elegant, or light-coloured *patals* from the mills became the vogue. A preference for simpler attire spread over Northern India also, and a large number of women changed over from their ornamented, hand-made lehngas or salwars to light mill-made saris and blouses.

In the case of men also, various changes in clothing have been taking place. Formerly, Hindus of the upper classes wore lace-bordered dhotis and chaddars (or *angavastrams*) on all occasions. But of late a craze for simplicity has come over them everywhere. In Madras, the high-class dhotis and *dupattas* of Madura and Salem continued to be the fashion longer than elsewhere in India, but after 1921 they also felt the pinch. A simpler kind of dhoti has taken their place, and the mill-made stuff came in as handy. Of course some of the poorer classes still wear the rough hand-made dhoti and *pancha* or *gamcha*, but they have also been gradually influenced by the example of their betters. Further, the growing use of trousers, pants and khaki drill shorts, especially in towns, has curtailed the demand for dhotis and lungis. Of the two, the lungi, which is worn chiefly by Muslims, and now also by Hindus to some extent, and in addition has extensive markets outside India, has on the whole fared better.

Nor was the change confined to the lower garment. The old-fashioned *angarakha*, worn all over India from of old, has been discarded in favour of plain *kurtas* in the case of some, and shirts and coats in the case of others. Even those who still don the traditional *achkhan* have made rather drastic changes in their underwear. The upper garment (*uparna*, *chaddar*, or *angavastram*) was formerly a necessity for all Hindus, but today the growing simplicity of habit has obviated its need, with the result that many handloom centres which formerly flourished by making such fabrics have been altogether dislocated. Perhaps the knitted underwear (vest or *banyan*) is the villain of the piece. Among the poorer countryfolk, it has come as a cheap substitute for *kurta* and has obviated the need for an upper garment. In all these cases, let it be noted the vagaries of fashion have benefited the mill and hit the handloom. The fact that a few men and women still wear hand-spun and hand-woven cloth on certain occasions and heap adulation on it has made little difference to the general result.

Perhaps the most spectacular of these changes is the disuse of turbans, whether *pagri*, *pheta* or *safa*. Formerly, all over India about 70 per cent of the men, both Hindus and Muslims, wore some kind of turban and some of these were many yards long. Today only a small proportion of people wear such headgear even in rural areas, and caps of all kinds, including Gandhi caps and Fez caps, have taken their place. Those who still continue to wear turbans have changed over to cheap mill-made muslins, mostly imported, and the demand for the hand-woven turban cloth has nearly disappeared.

Even more revolutionary has been the change in the dress of children, both boys and girls. In former days, boys wore little dhotis or pyjamas, but today a growing number of boys, especially in towns, wear khaki shorts and knitted vests. Similarly the little girls of today, especially those in towns, wear frocks and not saris or *khans* as their mothers did when they were young. The hand-weaving industry has now an insignificant share in the new dress of children and this has greatly affected the industry.

Changes in fashions abroad have also affected the Indian hand-weaving industry adversely. For instance, Dacca formerly sent embroidered *bourkhas* for the use of Turkish women. After the Turkish reform movement, the demand for such *bourkhas* rapidly declined and Dacca lost its market. Similarly, Masulipatam which formerly had a flourishing trade in *Kalamkaris* (printed cloth) with Persia lost it after 1930, as such cloth went out of fashion

there, and this industry has been completely stopped. In this way, a trade connection established from time immemorial and an industry in which India long excelled has passed away.

15. *Growing competition.*—All these changes in dress habits strengthened the mills in their competition with the handlooms. Whether it be a change from one style of dress to another or from one quality of cloth to another, the handlooms found themselves unable to adjust their production with the changing demand, while the mills availed themselves fully of the opportunity. Nor was the competition merely one of apparel and quality. A keen price competition also ensued, especially after certain mills in Western and South India took to the manufacture of saris and dhotis suited to the requirements of the common people. Such competition was greatly helped by the steady decline in the price of cloth as is shown in Chapter VIII.

Competition did not emanate from Indian mills only. A steady increase of foreign competition took place after 1929, and this affected many of the handloom fabrics, especially lungis, muslins, printed chintzes, and even dhotis and khaddar. After 1929, large quantities of artificial silk yarn and manufactured goods were imported into this country from Japan, and owing to the depreciation of the yen, their prices in India fell drastically after 1931.

This gave a great fillip to the use of artificial silk yarn by handlooms in India. Artificial silk yarn was freely used in conjuction with cotton or silk yarn, especially in Madras, in the production of saris, dress materials and shirtings, and the increase in the imports of this yarn from 71,000 lbs. in 1921-22 to 7 million lbs. by 1927-28 indicates how rapid was the advance in such manufacture. In the meantime, imports of artificial silk goods had been also mounting up from 15 million yards in 1925-26 to 125·2 million yards in 1932-33. This evidently stemmed the progress of Indian manufactures. Perhaps the greatest havoc was done by printed chintzes, taffetas, *daryae* of various kinds and other fabrics made partly or wholly from artificial silk. This did serious injury to the handloom industry. The increase of protective tariff did have some effect temporarily, but the imports rose again to 114 million yards by 1936-37.

16. *Silk handloom industry.*—The copious artificial silk imports affected the silk hand-weaving industry also. Silk weaving is perhaps as old as cotton weaving in India, and large numbers of handlooms have been plying all over the country especially in Bengal, Assam, the United Provinces, Bihar, the Punjab and Madras, and in the States of Mysore and Kashmir. This industry was little affected by the Industrial Revolution and the cheap imports from Lancashire in the 19th century. But all this changed after the war of 1914-18. Largely owing to the competition from abroad, a steady decline of this industry has been going on. Bengal which alone, according to the Indian Chamber of Commerce, Calcutta, employed one million persons in this industry before 1915 now employs hardly 20,000 persons. The Mysore Government stated in a memorandum to the Sericulture Tariff Board in 1933 that artificial silk did not compete with silk on the same plane but contributed indirectly to reduce the price. But the Provincial Governments complained that the competition was substantial. Silk also suffered by the craze for simplicity and plain laundered garments. Centres of silk-weaving like Paithan, Poona, Kornad and Murshidabad were the first to be hit by the change of fashions mentioned above.

17. *The overseas market.*—The overseas market enjoyed by the Indian handloom weavers was also affected by the competition of mill products from India and abroad. South India has long enjoyed a monopoly for the supply of Madras handkerchiefs to West Africa, and the exports of this cloth amounted in value to Rs. 43·5 lakhs in 1929-30; but owing to competition of imitation Madras handkerchiefs produced in Europe, this trade was considerably affected, as the figures of export trade (see table below) will show. Similarly, large quantities of *lungis* and *kailis* were being exported to Burma, Federated Malay States, Ceylon, Siam, Borneo, Java, Sumatra and parts of Africa. Owing to the trade depression and the competition of cheaper Japanese goods, this trade was greatly affected, and there was a great decline both in quantity and value. The value of exports of Madras handkerchiefs and *lungis* fell from Rs. 179·2 lakhs in 1929-30 to Rs. 45·9 lakhs in 1934-35. In other words, India's income from this item fell to nearly a fourth of what it was in 1929-30. The following table will bring out the situation :—

TABLE V.—*Export of Madras Handkerchiefs and Lungis from Madras.*

Year.	Madras Handkerchiefs.		*Lungis* and *Kailis*.	
	(In millions.)	Rs. lakhs.	(In millions.)	Rs. lakhs.
1914-15	1·4	8·2	19·3	72·0
1920-21	2·0	28·6	21·9	149·8
1924-25	3·4	43·5	31·5	178·5
1929-30	4·8	43·5	25·7	135·7
1930-31	2·6	21·4	19·2	97·6
1931-32	3·5	22·6	15·1	75·9
1932-33	5·1	36 3	13·6	65·2
1933-34	3·5	18·4	5·6	27·8
1934-35	1·3	12·4	6·6	33·5

18. *Powerlooms.*—The markets lost by the handlooms have not all gone to the mills. Of late a new rival has come into the field, namely single-unit powerlooms worked in cottages, and small prowerloom factories. During the last two or three decades, powerlooms* have been growing in many centres, especially in Bombay, the Central Provinces and Berar, the Punjab, Hyderabad and Mysore. In Bombay, at any rate, powerlooms were introduced in centres where the handloom had been deprived of its market, and were worked by weavers who formerly plied the handloom. Although the looms are generally old ones discarded by mills, these small units have been able to cut down production costs and have proved a serious rival not only to handlooms but

*In this Report we have used the term "powerloom" as standing for the single unit or small-scale powerloom factories, which are distinguished from the mills mainly by the fact that while the mills comprise several processes of manufacture, such as sizing, warping, winding and weaving, the powerlooms are generally confined to weaving mostly, the other processes being the same, in most cases, as those followed in handloom weaving.

to mills also. Wherever these little powerloom units have grown,—*e.g.* Surat, Bhiwandi, Malegaon, Burhanpur, Ichalkaranji,—the number of handlooms has declined and, in certain Bombay centres this has seriously affected the handloom industry. Moreover, the powerlooms are growing with amazing rapidity. The Bombay Industrial Survey Committee which reported in 1939 found only 2,500 such powerlooms in the Bombay Province, but in August 1941 according to reports that have reached us there were at least 6,400 in that Province alone and about 15,000 in all India, and the number is growing daily. These small powerloom workshops carefully observed the changes coming over women's dress and they had even greater facilities than the mills in the supply of certain speciality fabrics not suitable for mass production. Hence the loud complaints of hand-weavers in areas where powerlooms have increased. Thus, the three-cornered contest, which began in the nineteenth century between the handlooms, importers and Indian mills, has become a four-cornered one and already this has had repercussions on the mills as well as on the handlooms. But the less resourceful party (the handlooms) have been worst hit.

19. *Trade depression.*—All the ills of the handloom industry described above came to a head after the world economic crisis of 1929-30. The depression affected the industry in many ways. The immediate effect of the depression on the weavers was the fall in demand for their goods resulting from the decline in the purchasing power of the masses. The decline in the prices of primary products began before 1929-30 but became much steeper after it. India is essentially a price market, and any fall in the purchasing power of the masses is bound to accentuate this tendency. Although the prices of mill cloth did not fall to the same extent as those of primary products, there was a considerable fall and this did weaken the competitive position of the handloom.

Owing largely to the general depression and partly also to the vigour of foreign competition, the prices of all staple cloth declined rapidly from 1930, and especially after the exchange depreciation of 1931, a ruthless price-cutting went on in the cloth market. Bombay dhotis selling at Re. 0-15-9 in 1929 fell to Re. 0-9-8 by 1936, and prices of longcloth also declined at the same pace. The mill industry, especially outside Bombay, was able to stand such competition as their production costs were then falling as a result of technical improvements, but the handloom weaver had hardly any of those advantages, and he had to face the full force of the price-cutting. No doubt, the prices of yarn also declined to some extent, but they were artifically maintained at levels higher than they would otherwise have been, by a protective tariff. In the result, the hand-weaving industry was subjected to a severe strain. The Tariff Board of 1932 (Report, p. 170) summarises the position thus: "The severe trade depression which has prevailed since 1929 has seriously reduced the average earning capacity of the handloom weaver. The effect of the depression has been accentuated by the relative increase in the cost of yarn on account of the protective duty. Thus the position of the handloom weavers in comparison with the mill industry has considerably deteriorated since 1927."

20. *Weaver's condition after 1930.*—This view of the Tariff Board is amply supported by contemporary evidence. Bitter complaints from various handloom weavers' organisations regarding the yarn duty and mill competition

were made to the Tariff Board. The Bombay Province was perhaps the worst hit in this respect. According to the Director of Industries of that Province, even in centres like Belgaum where specialized cloth was produced, the wages declined from Rs. 1-8-0 per piece in 1929 to 12 as. in 1932. But in centres where ordinary cloths were produced and in the case of cloth which came under mill competition, the fall was more rapid and drastic. In Dhulia, for instance, the wages per piece of *chandrakala* sari fell from Rs. 1-4-0 in 1927 to 4 annas by May 1931. In Bhingar, the fall was from Rs. 3-8-0 per piece in April 1927 to 8 annas in May 1938 and in Malegaon from 14 annas to 4 annas per piece. In centres like Sholapur, where although the cloth produced had to face competition, the wages did not fall so steeply because the weavers were organised, but the effects of mill competition were felt there also, and the industry has been on the decline. A large number of the hand-weavers there took to *beedi*-making for livelihood and this has since been their mainstay. The demand for Ilkal saris also fell down drastically and the once flourishing centre of Ilkal experienced a severe depression. The decline of the hand weaving industry in Baroda was phenomenal; of the 10,000 looms which were formerly at work, more than 5,000 were discarded.

Things were not much better in other parts of India. In 1900, Burhanpur (C. P.) had about 10,000 looms making turban cloth and silk-bordered saris, which found a ready market in the States of Central India, but after 1921 both these industries declined, causing serious unemployment not only among weavers but in the numerous subsidiary trades like *jari* work, dyeing, etc. The weavers of Hyderabad were greatly affected by loss of markets and they migrated to mill centres and other areas in the Bombay Province. The well-known centres in Madras were also affected. Before 1920, Madura produced high-class dhotis and *dupattas* chiefly. The demand for these fell rapidly after the *khaddar* movement started and a large number of weavers who previously had been earning from Rs. 1-8-0 to 10 annas daily lost their employment. It is true that Madura weavers had the energy and enterprise to change the line of production (as we will see later) but this involved some dislocation and distress for some years. Salem also passed through severe unemployment, because of the falling demand for *gundanchu* dhotis, a former speciality of Salem, and the dumping of Japanese art-silk goods. The well-known Kornad saris suffered the same fate as the Madura dhotis, and the turban-cloth weavers of Dindigul and Aruppukottai found their whole trade gone by a freakish change of fashion. Two of the principal centres in Bengal, Dacca and Santipur, were in doldrums as a result of the ban on foreign yarn, and in both places large numbers of hand-weavers seem to have given up the trade and taken to agriculture. Wages in Santipur used to be Rs. 1-8-0 daily, but fell to between 8 and 12 annas by 1930 and to 4 annas since.

In most of the above-mentioned centres, the bulk of the town's population depended on handloom weaving and when it declined the prosperity of the whole town vanished. A visit to celebrated weaving centres, like Burhanpur, Dacca, Dholka, Conjeevaram and Santipur, will show how seriously this has affected the urban population as a whole. Centres like Sholapur, Poona, Gokak and Baroda have not suffered so severely in spite of a decline in hand-weaving, because mills or other industries came to their rescue.

Thus in the early thirties, the condition of the handloom industry reached a pitiable stage. Unemployment was rife in most important centres, and even

where there was some employment the weaver was getting only a pittance. Messrs. W. A. Beardsell & Co., Ltd., a Madras firm which has a long experience of the export trade in handloom cloth, wrote in 1935 in their memorandum to the Tariff Board : " The cumulative effect of the various factors operating against the handloom weaver is that to-day he is in a most precarious position. There is no continuity of work. He has to change from the weaving of saris to the weaving of may-be exportable articles. But however hard he may try he can never get more than a starvation wage under the present conditions. Every little cut in the duty should certainly help him by making him more competitive not only in the internal markets, but in those outside countries where his goods are marketable. Every discouragement and setback means greater unemployment and the loss to this country in the disappearance of an ancient handicraft will be fraught with considerable misery."

It may be argued by some that in spite of the decline in some areas, in India as a whole handloom production has been maintained and that on balance the decline is not great. We have to remember in this connection that production is not a safe criterion in the case of an industry like hand-weaving pursued hereditarily by certain classes or castes. A mill will close down if it does not earn a profit, but the handloom will go on even if it brings no profit, because the weavers depend on it helplessly for their livelihood. It is even said that the weaver works longer and produces more where wages go down in order that he might make up by quantity what he loses in price per piece. The increased use of fly-shuttle sleys had also a great influence on output. This question has been dealt with at greater length in Chapter X. Here we may quote the Tariff Board (1932) who have put the position cogently : " Since the handloom weaver cannot regulate his production according to the state of the market without risking starvation for himself and his family the true criterion for judging the position of the handloom industry is not the proportion of the quantity of cloth woven on handlooms to the total production but the wages earned by the handloom weaver. Judged by this test, his position on the evidence we have received must be regarded with some concern" (p. 171).

21. *Measures adopted by the Provincial and State Governments.*—This serious condition of the weavers aroused the interest of the Government of India. Hitherto, the handloom industry had not attracted the attention of the Government of India to any great extent. Only the Provincial and State Governments had been trying to help the industry as best as they could. The first concern of these Governments was the introduction of improved appliances, especially fly-shuttle sleys. In Madras, where interest in the handloom industry began early and has been kept up since, the Government went so far as to start a weaving factory at Salem in 1906, for undertaking experimental work for which Mr. (later Sir) Alfred Chatterton was employed. This evoked much enthusiasm and the Industrial Conference of 1908 made recommendations of a far-reaching character in regard to industrial policy. As, however, the Secretary of State (Lord Morley) disapproved of this on *laissez-faire* grounds, the Madras Government launched schemes of industrial education. At the outset, the idea, in Madras as elsewhere, was to spread the new technique by means of training imparted in industrial schools, but it was soon realized that the demonstration of improved appliances at the weaver's door was much more effective than training weavers' children

in a few industrial schools, and therefore itinerant demonstration parties were organised for serving the different areas one after another. Such efforts gained much momentum after the Reforms of 1919. In Madras, two such demonstration parties worked as far back as 1913, and by 1922-23, the number had reached ten. Subsequently some of the parties were retrenched and in 1932-33, all were disbanded owing to financial stringency. The Government of Madras have also maintained a Textile Institute and given grants-in-aid to several weaving schools maintained by private bodies. In Bombay, nine weaving schools moved from place to place (subsequently reduced to seven) and in addition, eleven demonstration parties were also at work. In the Central Provinces and Berar, a special staff toured continuously in the villages popularising the new appliances, but no weaving schools were established. In the United Provinces, there were at first peripatetic weaving schools, but these were abolished and model weaving schools were established at certain centres, with the charge of demonstration work also. The Punjab had no regular touring parties, but improved methods were demonstrated at fairs and exhibitions. In Bihar and Orissa, a school and ten peripatetic parties (later reduced to seven) were maintained. The Bengal Government established 8 fixed weaving schools and 26 peripatetic schools. Three demonstration parties have been working in Assam since 1926. Besides giving training in improved methods, some of the leading textile institutes also carried on research work in the various preparatory processes, weaving, dyeing and printing. On the marketing side and in the improvement of patterns and designs not much was done in most Provinces, till lately; but in the United Provinces and in Bihar central emporiums for the production and marketing of improved fabrics were established and these did admirable spade-work although in a limited field.

Owing to such efforts, the use of fly-shuttle sleys, dobbies, jacquards and other improved appliances had increased. Demonstration was not confined to improved looms and preparatory processes only; special dyeing demonstration parties also were organised in Madras and Bombay. In the Central Provinces and Berar, a dyeing and printing demonstration party worked from 1928 and aerograph printing was introduced. In regard to marketing and improved designs, the achievement was not a great deal, but the Arts and Crafts Emporium at Lucknow, and Bihar Cottage Industries at Gulzarbagh, Patna, did a considerable demonstration work for the whole of India.

At the same time, the leading Indian States also moved in the same direction. Hyderabad opened a Cottage Industries Institute and started demonstration parties. In Mysore, a Central Weaving Institute and three departmental schools were established, and ten demonstration units were organised. Gwalior, Kashmir, Travancore and Cochin also worked on similar lines.

22. *The Government of India's grant-in-aid.*—All this did not help the hand-weavers very much in counteracting the forces working against them after 1930. The markets for handloom cloth went on dwindling. The Provincial Governments were deeply concerned about the situation, but found that they could not do anything effective by themselves. The problem had to be tackled on an all-India basis. The Provincial Governments who previously were jealously guarding themselves against interference from the Centre, gradually realized the urgency of combined action, and at their instance a

reconstituted Industries Conference was held in Simla, July 1933. The subject of handloom industry was brought up prominently at this Conference. Having regard to the serious nature of the situation facing the hand-weaving industry, the Government of Madras made a proposal for levying a cess on Indian mill yarn with a countervailing duty on Indian and imported cloth, the proceeds of which were to be applied to providing a proper organisation for the handloom industry mainly through the co-operative agency. This suggestion did not receive general approval, nor did the idea of co-operative agency evoke any enthusiasm. However, the Hon. Mr. (now Sir) Alan Lloyd, while disapproving of a cess on imported yarn, indicated the possibility of a grant-in-aid from the central revenues. The idea soon received the attention of the Government of India who recognised that the handloom industry was hit by the import duty on yarn, and along with the Tariff (Textile Protection) Amendment Act (1934), a grant to the handloom industry equivalent to the proceeds of an import duty of a ¼ anna per pound on imported yarns up to 50*s.* was included in the budget for 1934-35. The schemes sent up by the Provinces for the utilization of the grant and the merits of the co-operative agency for administering this grant were discussed at the next Conference. The grant, which eventually amounted annually to Rs. 5 lakhs, was distributed in the year 1934-35 and was utilized by the Provinces for approved schemes. The utilization of this grant and the efforts of the Provinces in this connection will be discussed in Chapter IX.

This grant marks a distinct stage in the history of governmental efforts at helping the hand-weaving industry. The Provincial Governments utilized it for launching schemes of marketing, improvement of designs, etc. It was, however, soon realized that financial aid, however generous, was not sufficient to remove the handicaps that were hampering the industry's progress. The Tariff Board (1932) examined various proposals in this connection, especially the restriction of mill output in classes of cloth which form the bulk of the output of the handloom industry, but found it impracticable and was only able to make an exhortation to the mills " to regard it as an essential obligation arising from the grant of protection to refrain from entering into unfair competition with the handloom industry so as not to impair its relative position " (para. 178). It considered more favourably the proposal to impose a cess on mill yarn for creating an all-India fund for helping the hand-weaving industry, but was of opinion that the proposal was not ripe to be given effect to at once. The Special Tariff Board (1936) confirmed the views of the previous Board in regard to mill competition, but found that the adjustment of the interests of the handloom industry was not included within its terms of reference. The Ninth Industries Conference, held at Lahore in December 1937, discussed this subject in a general way, and the Chairman assured the Conference that the Government of India would take suitable action for facilitating some sort of arrangement between mills and handlooms.

23. *Appointment of the Fact-Finding Committee.*—The Government of Madras took the initiative again. On 17th April 1939, they addressed a circular letter on this subject to the Provincial Governments as well as the Central Government, discussing the various suggestions put forward, *viz.*, (1) prohibition of mills from working at night, (2) fixing a quota of production for mills, (3) earmarking the styles of cloth to be produced on the handlooms and in the mills, (4) levy of an excise duty on mill cloth or terminal tax on cloth

imported from other Provinces. The Madras Government did not show its preference for any of these proposals, but stated that " a proper solution of the problem and the success of all endeavours in this direction can be fully assured only if all Provinces and States adopt a common policy. The problem of the handloom weaver is an all-India problem and should therefore be dealt with on an all-India footing. Without the co-operation of all Provincial Governments and the Government of India, it will not be possible to prevent further deterioration in the condition of millions of handloom weavers."

After the outbreak of the present war, there was a general expectation that hand-weaving would receive a fillip as happened during the war of 1914-18, but such expectations were soon belied. During the last war, the mill industry was in a comparatively undeveloped state and was unable to cope with some of the new requirements. The handloom, therefore, was able to get some part of the new demand that arose out of war needs or by stoppage of imports. The mill industry has since made rapid strides and built up a large reserve capacity. During the last war, again, the handloom weaver could obtain foreign yarn, at least from Japan, but this time all possibilities of obtaining foreign yarn were closed and India has not only to supply its own yarn but to supply other countries especially of the Eastern Group. The result has been a scarcity of yarn, which became particularly serious after April 1941.

The Industries Conference discussed again in December 1939 the conflicting interests of the mill and handloom industries and the Provincial Governments urged the need for early action in view of the serious difficulties facing the handloom weavers. Realising the urgency of the problem, the Government of India circularized the Provincial and State Governments and important millowners' associations calling for their views regarding the various proposals made for reconciling the conflicting interests of handlooms and mills. From the replies received it was found extremely difficult to arrive at any workable solution, and even on the actual condition of the industry to-day, a fundamental difference was disclosed between the mills' representatives on the one hand and representatives of the handloom industry on the other. Therefore, a Conference of representatives of the mill and the handloom weaving industries and of certain Provincial Governments was convened at Delhi on the 6th and 7th December 1940. The discussions at the Conference showed that there was a serious lack of reliable data on many crucial points relating to the hand-weaving industry and on the exact nature of the competition if any between it and the mills. It was therefore decided to appoint a Fact-Finding Committee to investigate the problems of the handloom industry, the types of production, the difficulties of getting yarn and marketing finished products, the state of the handloom technique, the lines on which the industry could be reorganised and the possibility of demarcating a special field for the handloom. The merits of the various proposals were also discussed at the Conference but owing to the paucity of the data available for decision, the consideration of policy was deferred till after the report of the Committee was available. The Twelfth Industries Conference which met at Lucknow on the 16th and 17th December unanimously agreed to the proposal regarding the appointment of a Fact-Finding Committee and accordingly this Committee was constituted by the Commerce Department early in 1941.

CHAPTER II.

Extent of the Industry.

i. Number of looms.

24. *General.*—The extent of the hand-weaving industry is to be judged mainly by the number of looms and weavers and the total production of cloth by them. Therefore, it is necessary at the outset to find out how many looms there are and how many persons are engaged in working them. Information on such points is generally obtained from the periodical population censuses. In India statistics regarding weavers (and looms also in 1921) have been collected at the decennial censuses, but unfortunately such statistics are neither exhaustive nor accurate. The Census Commissioners themselves have not claimed any high degree of accuracy for their figures. At any rate, for periodical comparisons they are unsuitable, as the basis of enumeration has been changed from census to census. With all such blemishes, the latest census statistics would have been very useful if only we could get them. More detailed information about weavers than in past censuses was collected at the 1941 Census, but owing to the financial stringency resulting from the war it was decided by the Government of India not to proceed with the analysis of the occupational tables which contain this information. Therefore, this valuable source of statistics is denied to us in British India, except in the case of C. P. and Berar where with a special grant by the Provincial Government some tabulation has been made. The Indian States conduct their own census, and most of them are proceeding with tabulation of the data, but unfortunately the full results are not yet available. We have, therefore, to depend chiefly on the surveys conducted by the Provincial and State Governments.

Handloom censuses were taken several times in the Madras Presidency, during the last century, beginning with one in 1856. An estimate was made for the whole country at the 1901 Census, but the only all-India census of looms was conducted in 1921. The Census Commissioner was rather disappointed with the results and stated that " any estimate of the tendency of the home weaving industry based on the census figures is at present inconclusive." But he added that " if it is to be continued it may afford material for a better estimate at a future census." This advice was, however, not heeded and no loom census was taken at the subsequent two censuses. We have, therefore, to fall back upon other sources for our information about the present number of looms.

Several Provinces have carried out *ad hoc* censuses of looms and weavers, and others have made estimates in other ways. Such estimates are possible without any large cost, thanks to the existence of guilds or other social institutions among the weavers. Most of the weavers in India are members of certain castes, whose hereditary occupation from time immemorial has been weaving. Each caste has it guild or *panchayat*, which performs social and religious functions with funds periodically collected by subscription among its members. Such caste organisations exist all over India among weavers, and are called *panchayat*, *sabha*, *sangh*, *mandal*, etc. We will deal with their functions later. What interests us in the present connection is that subscription to the Guild is on a loom or family basis, in many parts of the country. Therefore, the headman of each locality has to maintain a list of all the families and looms,

and such lists cannot be incorrect, for obvious reasons. Unfortunately, such customs do not obtain everywhere and therefore in many places the numbers have to be estimated with the help of the headmen. This is what has been done in most cases.

25. *Total number of looms.*—From the statistics we have been able to gather, we find that the total number of looms in India excluding Burma is about 2,000,000. This is based on the data supplied by the various Provinces and States. Among the States, Hyderabad, Mysore, Travancore, Kashmir, Gwalior, Baroda, Cochin, Indore, Kolhapur and States of the Kolhapur Agency have supplied us statistics of looms. The States left out are mostly in the Rajputana Agency. For this area we have accepted the figures collected at the handloom census for 1921. The same is the source for Ajmer-Merwara.

Some previous estimates of looms for all India are available. The number of looms was estimated at 2·7 millions at the 1901 Census, and about 2 millions in the 1921 Census, and both included Burma. The Tariff Board (1932) estimated the number at 2,500,000 (including Burma). The Census estimate of 1921 and the Tariff Board estimate of 1932 are given in the Table along with our estimates for 1940.

TABLE VI.—*Total number of looms in India in the years 1921, 1932 and 1940.*

Serial No.	Province or State.	1921 (Census).	1932 (Tariff Board).	1940.
	Provinces.			
1	Ajmer-Merwara	1,587	..	(a)1,587
2	Assam	421,367	425,000	421,022
3	Bengal	213,886	200,000	142,461
4	Bihar	(b)124,021	150,000 (Bihar and Orissa)	103,096
5	Bombay	..	100,000	117,100
6	C. P. & Berar	..	100,000	73,338
7	Madras	169,403	225,000	340,451
8	N.-W. F. Province . . .	..	500	10,000
9	Orissa	(b)40,571	..	48,000
10	Punjab	270,507	140,000	284,205
11	Sind	..	..	3,823
12	United Provinces	..	75,000	244,252
13	Delhi	1,067	450	(c)450

(a) These figures are the same as those of the handloom Census 1921. As no later figures are available, these figures have been given.

(b) The Census figure was for Bihar and Orissa, then a single Province. The Director of Industries, Orissa, has supported the figure 40,571 for 1921. Subtracting this we get 124,021 for Bihar.

(c) The figure is adopted from the Tariff Board Report of 1932.

TABLE VI—*contd.*

Serial No.	Province or State.	1921 (Census).	1932 (Tariff Board).	1940.
	States.			
1	Baroda	10,851	..	10,219
2	Cochin	..	..	3,158
3	Gwalior	..	..	6,000
4	Hyderabad	15.434	140,000	114,500
5	Indore	.	..	1,002
6	Jammu & Kashmir	..	(*d*)	23,903
7	Mysore	..	..	50,000
8	Rajputana (Agency)	89,741	..	(*a*)89,741
9	Travancore	..	..	19,009
10	Kolhapur & the Deccan States	..	..	14,995
11	Other States	..	(*e*)250,000 (Estimated by Tariff Board).	70,000
	Total (excluding Burma)	1,458,435	1,805,950	2,193,262

(*d*) For 1932, Director of Industries, Jammu and Kashmir, estimated 42,000 as the figure for his State.

(*e*) This figure includes those for Cochin, Gwalior, Indore, Jammu and Kashmir, Mysore, Travancore, and the Deccan and Kolhapur States.

One may be tempted to compare the number of looms at the three successive periods and formulate conclusions therefrom. But such a comparison is not justified, seeing that neither the Census of 1921 nor the Tariff Board's estimate was complete. The Tariff Board's estimate for the United Provinces was 75,000 looms, but the Government of that Province considered this a gross under-estimate. Their present estimate comes to 244,252.

While it is not possible to make all-India comparisons in regard to the number of looms at various periods, information of a fairly reliable nature is available for certain Provinces. Statistics of looms are available for Madras Presidency from 1871, when the number was 280,000. In 1889, the Board of Revenue estimated the number at 300,009. The Statistical Atlas compiled in 1920 gave 242,000 as the number of looms, while according to the Handloom Census of 1921, the number was 169,403. In 1931, the number was 334,407 according to the Madras Census Report and 225,000 according to the Tariff Board estimate. The figure given for 1941 is 340,451. Thus, there has been an increase in the number of looms in Madras. In Bengal, on the other hand, the number of looms has diminished from 213,886 in 1921 (according to Census) to 142,461 in 1941—a fall of 34 per cent. Perhaps this fall is due to the increase in the number of fly-shuttle looms, as will be seen later.

26. *Working and Idle Looms.*—The importance of loom statistics can be exaggerated. Even if we were able to get the correct number of looms, we could not make any reliable conclusions therefrom regarding the state of the industry, seeing that looms in a cottage are not like looms in a mill. If weaving in a mill ceases to be profitable, looms will be discarded, but a domestic loom is like any family furniture and will remain for long as an 'heirloom' even if it is not worked. Looms will not be discarded, at any rate, for some years and they will fetch little if sold. Therefore, if any useful comparison is to be made, it must be with reference to looms actually working. It was with this object in view that we collected the statistics of idle looms, looms which though not discarded are not generally working. This does not refer to occasional idleness; nearly all looms have idle months, but some of the looms are almost always idle and it is this category that we speak of as idle looms. The following table will bring out that nearly 13 per cent of the looms in India are idle. In Baroda, for instance, about 47 per cent of the looms are no longer worked. Similarly, in Orissa, the United Provinces, the Punjab and Bihar 27, 21, 20 and 19 per cent respectively of the looms are idle. Of a different category are the looms of Assam which are only meant to be worked as a part-time occupation.

TABLE VII.—*The number of active and idle looms in India, 1940.**

Provinces and States.	No. of looms working.	No. of looms idle.	Total.	Percentage of idle looms to Total.
1	2	3	4	5
Provinces.				
1. Assam	411,018	10,004	421,022	2
2. Bengal	121,091	21,370	142,461	15
3. Bihar	83,584	19,512	103,096	19
4. Bombay	103,300	13,800	117,100	12
5. Central Provinces and Berar	71,390	1,948	73,338	3
6. Madras	294,101	46,350	340,451	13
7. Orissa	35,000	13,000	48,000	27
8. Punjab	227,295	56,910	284,205	20
9. Sind	3,823	*Nil*	3,823	*Nil.*
10. United Provinces	192,890	51,362	244,252	21
States.				
1. Baroda	5,387	4,832	10,219	47
2. Cochin	2,608	550	3,158	17
3. Gwalior	5,000	1,000	6,000	17
4. Hyderabad	108,775	5,725	114,500	5
5. Indore	1,002	(a)	1,002	(a)
6. Jammu and Kashmir	22,091	1,812	23,903	8
7. Kolhapur and Deccan States	13,313	1,682	14,995	11
8. Mysore	35,000	15,000	50,000	30
9. Travancore	18,402	607	19,009	3
TOTAL	1,755,070	265,464	2,020,534	13

*This table excludes Delhi, Ajmer-Merwara, N.-W. F. Province, and the Rajputana Agency. Hence the apparent discrepancy between this and the previous table.

(a) Not known.

27. *Looms classified according to textiles.*—The great majority of looms in India are engaged in cotton weaving. Of the total number of looms, 72 per cent are engaged in cotton, 16 per cent in silk, 5 per cent in wool, 1 per cent in artifical silk and 6 per cent in other textiles. We have of course excluded jute, coir and other fabrics. As many as 96 per cent of the looms are weaving cotton in Orissa, 89 per cent in C. P. and Berar, 89 per cent in Bihar, 86 per cent in the Punjab, 84 per cent in Sind, 82 per cent in Madras and 80 per cent in Bengal. In Bombay and the United Provinces cotton accounts for only 75 per cent and 66 per cent respectively. Among the States, Travancore, Cochin, Gwalior and Baroda are predominantly cotton weaving areas. In Assam where silk is commonly worn, silk weaving accounts for 50 per cent of the looms. The United Provinces, Sind, Mysore and Bengal follow with 21, 16, 14, 10 per cent respectively. Kashmir has also large numbers of silk looms, but according to the figures supplied to us only 3 per cent are silk. Wool weaving is most prominent in Mysore with 14 per cent, the United Provinces and Hyderabad with 13 per cent each and Bihar and the Punjab with 6 and 7 cent respectively of the looms engaged in it. The following table will make all this clear :—

TABLE VIII.—*Number of looms classified according to textiles.*

Province or State.	Cotton.	Wool.	Silk.	Art. silk.	Mixtures.	Jute or any other fibre.	Total.
1	2	3	4	5	6	7	8
1. Assam	208,022 (50%)	..	203,000 (50%)	..	..	..	411,022 (c)
2. Bengal	113,969 (80%)	2,849 (2%)	14,246 (10%)	1,425 (1%)	9,260 (7%)	712	142,461
3. Bihar	92,390 (89%)	6,166 (6%)	1,993 (2%)	2,547 (3%)	..	..	103,096
4. Bombay	88,150 (75%)	..	11,300 (9%)	..	17,150 (15%)	500	117,100
5. C. P. & Berar	65,214 (89%)	4,021 (6%)	2,503 (3%)	50	1,550 (2%)	..	73,338
6. Madras	269,306 (82%)	266	19,192 (6%)	5,067 (2%)	34,426 (10%)	1,235	329,492 (b)
7. Orissa	46,000 (96%)	10	1,990 (4%)	..	..	..	48,000
8. Punjab	244,916 (86%)	18,500 (7%)	4,739 (2%)	15,000 (5%)	1,000	..	284,155 (c)
9. Sind	3,211 (84%)	..	612 (16%)	..	..	..	3,823
10. United Provinces	161,913 (66%)	30,585 (13%)	51,754 (21%)	..	..	..	244,252
Total British India	1,293,091	62,397	311,329	24,089	63,386	2,447	1,756,739
1. Baroda	3,993 (80%)	8	24	1	1,361 (20%)	..	5,387 (d)
2. Cochin	3,148 (100%)	..	10	..	..	..	3,158
3. Gwalior	4,245 (85%)	325	2	75	353 (7%)	..	5,000 (d)
4. Hyderabad	56,065 (52%)	14,393 (13%)	4,188 (4%)	1,400 (1%)	32,729 (30%)	..	108,775 (d)
5. Indore	..	..	..	..	..	..	1,002
6. Jammu & Kashmir	6,351 (27%)	16,766 (70%)	786 (3%)	..	..	..	23,903
7. Mysore	25,000 (71%)	5,000 (14·5%)	5,000 (14·5%)	..	..	..	35,000 (d)
8. Travancore	19,009 (100%)	..	..	..	..	..	19,009
9. Deccan & Kolhapur States.	6,298 (46%)	313	15	..	6,987 (54%)	..	13,613 (a)
Total States (a)	124,109	36,805	10,025	1,476	41,430	..	214,847
GRAND TOTAL	1,417,200 (72%)	99,202 (5%)	321,354 (16%)	25,565 (1%)	104,816 (6%)	2,447	1,971,586

(a) All States are not included.
(b) 21,198 idle and discarded looms are not included.
(c) The total in each of these cases differs from that of Table I.
(d) Working looms only are taken into consideration.

The Millowners' Association, Bombay, have in their memorandum drawn special attention to the question of looms engaged in weaving mixtures. They say: "It has recently been found that by far the largest proportion of the cottage handlooms in the Province of Bombay consists of those which turn out mixture fabrics, and that the number of looms exclusively engaged in cotton weaving is relatively small." Our findings point to a very different conclusion, as can be seen from Table VIII. In most Provinces the percentage is very small. Even in Bombay, only 17,650 or about 16 per cent of the total number of looms are engaged in weaving mixtures, and this cannot obviously be regarded as a large proportion. The percentage of mixtures is higher in the State of Hyderabad (30 per cent), and this is because that State is engaged in making *himru*, *mushru* and certain types of coatings and shirtings and other mixed piecegoods in which silk or artificial silk forms a complete set either in the warp or in the weft. According to the existing trade practice a cloth is considered a mixture if along with cotton yarn, silk or artificial silk yarn forms a substantial portion either in the warp and the weft or in both. A cotton cloth, therefore, does not become 'mixture' merely because silk or artificial silk yarn is used for decorating the fabrics or for developing the borders or headings. This practice is also observed by the mills in their returns to the Director-General of Commercial Intelligence and Statistics. The fabrics entered in Table VIII under "mixtures" consist of those in which silk or artificial silk forms either the complete warp or the complete weft, or those in which a substantial portion of silk or artificial silk is used both in the warp and in the weft.

We have hardly any information regarding the proportion of the various textiles in previous years, but in respect of Bengal it is believed that more of the looms were formerly weaving silk. There are indications to show that there has been a steady decline in this industry, not only in Bengal but in other Provinces also. In the States of Mysore and Kashmir, however, there seems to have been an advance. In Mysore, many looms have changed over to silk, as cotton weaving has proved unprofitable.

In a broad sense, handloom weaving includes the weaving of all types of fibres, of vegetable, animal, mineral and chemical origin. In this report, however, we have confined our attention to the weaving of cotton, wool, silk, artificial silk and mixtures thereof. There is some information regarding jute in the table above, but it is not clear whether the figures in that column include, fibres like sann-hemp, ramie, etc. Apparently, coir is not included; Travancore which has the largest number of coir looms has not supplied any figures in that column.

28. *Types of handlooms.*—Of a total of 2 million handlooms in India about 64 per cent are throw-shuttle looms, 35 per cent fly-shuttle looms, and only 1 per cent of other categories. As we have no statistics of such classification at earlier periods, no comparison is possible. It is certain, however, that twenty years ago the number of fly-shuttle looms was far less. The rapid increase since in their number was due to the active endeavours of the Governments to popularise them.

TABLE IX.—*Looms of different types.*

Province or State.	Throw-Shuttle looms.	Per cent to total including other looms.	Fly-Shuttle looms.	Per cent to total including other looms.	Total (2)+(4).	Total including other looms.
Provinces—						
Assam	410,000	97	11,000	3	421,000	421,022
Bengal	45,102	32	95,759	67	140,861	142,461
Bihar	64,147	62	38,915	38	103,062	103,096
Bombay	45,000	37	66,860	55	111,860	117,100
C. P. & Berar	34,894	48	34,073	47	68,967	73,838
Madras	63,860	19	275,655	81	339,515	340,451
Orissa	41,000	85	7,000	15	48,000	48,000
Punjab	270,862	95	13,233	5	284,095	284,205
Sind	1,147	30	2,676	70	3,823	3,823
United Provinces	197,592	81	46,660	19	244,252	244,252
Total (British India)	1,173,604		591,831		1,765,435	1,777,748
States—						
Baroda	8,501	83	1,508	15	10,009	10,219
Cochin	800	27	2,200	73	3,000	3,158
Gwalior	5,253	88	200	3	5,453	6,000
Hyderabad	72,812	64	39,148	34	111,960	114,500
Indore	..	..	..	..	1,002	1,002
Jammu & Kashmir*	22,887	96	1,016	4	23,903	23 003
Mysore	11,150	22	38,850	78	50,000	50,000
Travancore	2,009	11	17,009	89	19,009	19,009
Deccan & Kolhapur States.	817	5	11,094	74	11,911	14,995
Total (States)	124,220		111,025		236,247	242,788
GRAND TOTAL	1,297,824		702,856		2,001,682	2,020,534

* 11,017 Wool weaving looms in Kashmir are classified under Throw-Shuttle looms.
683 Silk weaving looms in Kashmir are classified under Fly-Shuttle looms.

It will be noted that the proportion of fly-shuttle looms is largest in Travancore (89 per cent), Madras (81 per cent), Mysore (78 per cent), Cochin (73 per cent), Bengal (67 per cent), Bombay (55 per cent), and it is low in the Punjab (5 per cent), Orissa (15 per cent) and the United Provinces (19 per cent). While in Bengal the total number of looms has fallen with the increase of fly-shuttle sleys, the total has only risen in Madras, indicating that production has advanced more in the one than in the other.

29. *Throw-shuttle looms.*—The oldest looms in India worked with the throw-shuttle sleys. The mechanism was very simple and could be seen even now in its primitive form in the hill tracts of Assam and Bengal. The familiar loom in Assam consists of one sley, one bamboo reed, one shuttle, one warp beam and one cloth beam. Its cost is below Rs. 5. It is generally fitted on

four posts, with a cross bar for the support of the sley and can be conveniently worked on the verandah of houses by day and hung up on the inside wall by night. The great bulk of looms in Assam are of this category. The looms used by Manipuris, Nagas, Tripuras and Bhutias are simpler and they cost even less. Such simple weaving devices which number anything up to 5 lakhs, or a fourth of the total number of looms in India, cannot be classed on a par with the heavy and costly fly-shuttle frame looms which work in a Malabar hand-weaving factory. Hence the futility of counting the number of looms as an index of the condition of the weaving industry.

Subsequently, by an invention in India at some early date, shedding came to be done through heddles or healds by the motion of the feet, the looms began to be made of more lasting material and it was located more permanently at a place with a pit dug for the convenience of the weaver to work in a sitting posture. Such were the looms in use in the plains all over India,—the looms that made the marvellous muslins and *paithanis*. Even now as many as 64 per cent of the looms in India are of this category.

30. *Fly-shuttle looms.*—The fly-shuttle sleys were first introduced in England in 1733 by John Kay. By this device, the shuttle is propelled by hammers placed at the ends of the lathe which was lengthened for the purpose, and thus weaving can be done more rapidly. The fly-shuttle sleys were introduced in India long ago, but in spite of their greater output and profitableness the weavers have been slow to adopt them because it is generally believed by them, not without a show of reason, that they are not suitable for weaving high-quality fabrics, and in the course of our tours, we found that this belief is still prevalent in many areas. However, owing to the energetic efforts of Government, 35 per cent of the total number of looms in India (if we exclude Assam 44 per cent) are fitted with fly-shuttle sleys. Even in 1921, the fly-shuttle was commonly in use in the Tamil districts of the Madras Presidency and among the Telugu-speaking Padamasali weavers of Hyderabad and the Bombay Deccan (Census Report 1921). The Banking Enquiry Committee Report for the Central Provinces and Berar (1929-30) stated that from 1915 to 1929 the Weaving Branch of the Industries Department introduced 25,000 improved fly-shuttle sleys in 1,750 centres, that the output had increased by at least 75 per cent and that over-production had brought about a depression (pp. 227-8).

As mentioned above, the bulk of the looms in India, both fly-shuttle and throw-shuttle, have a pit at the back for the sitting convenience of the weaver. As the pit is a source of dust and dirt, attempts were made to place the looms on a frame. On the Malabar coast, owing to the early influence of the Basel Mission factories, this system was widely introduced, and as wood is not dear there, it became popular; but elsewhere the frame loom is not much used owing partly to its higher cost (it costs anything between Rs. 20 and Rs. 60); and partly also to the confirmed view of weavers that the propinquity of the warp to the ground helps to retain humidity. The late Sir P. Theagaroya Chetty (himself a weaver) said in 1908: "I am satisfied that the pit-loom with the fly-shuttle arrangement attached will become the ideal loom, and is bound to replace the ordinary country loom except, of course, in regard to the manufacture of solid-bordered cloth."

31. *Semi-automatic looms.*—During the last fifty years various mechanical improvements have been made in the handloom with a view to increasing output. These improved looms are known as "automatic" or "semi-automatic" looms. In reality they partake of some of the advantages of the powerloom. The price of these looms is rather high for the ordinary weaver. The addition of more parts necessarily requires frequent renewals and repairs which are not always possible in an up-country village. Consequently these looms have not been very popular among the weavers, although in some areas like Surat in Bombay, Dacca and Pabna in Bengal, and in some places in the Central Provinces, the Punjab and Hyderabad, these looms have been adopted and are working successfully.

The principal types of semi-automatic and automatic looms in India are the Salvation Army loom, the Chittaranjan loom and the Hattersley loom. In the Salvation Army type, the operation of picking and beating is performed by the movement of the sley while shedding is done by the feet. The take-up and let-off motions are automatic. It was first introduced in the Salvation Army headquarters near Bombay about forty years ago. The Chittaranjan loom is an improved type of the ordinary fly-shuttle loom and the output is said to be 50 per cent more than that obtained on a fly-shuttle loom. It has an automatic take-up arrangement and the sley is underlaid and has been attached to two flywheels. This arrangement gives acceleration to the sley. In the case of the Hattersley loom, almost all the motions are automatic. With the exception of Surat, it has not become very popular among weavers in India owing to its high cost, its complicated mechanism, the difficulty in replacing worn-out parts and its unsuitability for manufacturing the kind of cloth that is usually woven on handlooms in India out of the yarn generally available. Nor is it suited to the warping and sizing methods commonly used in the country.

TABLE X.—*Semi-automatic looms in India.*

Province or State.	Hattersley domestic.	Semi-automatic.	Salvation army.	Tape looms.	Others.	Total.
Assam	..	..	..	..	22	22
Bengal	..	1,600	..	..	..	1,600
Bihar	4	..	2	28	..	34
Bombay	..	2,240	..	1,000	2,000	5,240
C. P. & Berar	..	..	..	200	4,171 (Durry)	4,371
Madras	..	..	..	..	936	936
Orissa	..	..	..	..	..	..
Punjab	60	..	..	50	..	110
Sind	..	..	..	..	..	..
United Provinces	..	..	..	..	..	..
Baroda	1	..	..	209	..	210
Cochin	8	..	..	150	..	158
Gwalior	5	..	22	20	500	547
Hyderabad	10	5	25	2,000	500 (*Chokis* for lace work)	2,540
Indore	..	..	..	..	..	..
Jammu & Kashmir	..	..	..	..	..	..
Kolhapur & Deccan States.	..	4	..	..	3,080	3,084
Mysore	..	..	..	..	..	..
Travancore	..	..	..	..	..	..
TOTAL	88	3,849	49	3,657	11,209	18,852 (1 per cent of total including throw and fly-shuttle looms).

ii. Number of Workers.

32. *The available statistics.*—There are various difficulties in counting the workers in the hand-weaving industry as it is functioning to-day. Formerly, each weaver was an independent worker, but to-day as we will presently see in Chapter IV, the great majority of them work for a wage under a master-weaver, mahajan or *karkhanadar*. But the condition of the industry is still unorganised, most of them still work in their own homes, and there is no facility for collecting periodical returns as in the case of mills. Further as weaving has been for long connected with certain castes, there is a tendency on the part of those members of the weaving castes who have discarded their traditional occupation to enter themselves as weavers at the census, especially if the new occupation adopted happens to be considered socially inferior to weaving. Similarly, those who have lately taken up weaving may not enter themselves as weavers, especially those who had formerly been pursuing an occupation considered superior to weaving. Owing to all these factors, a census of weavers cannot bring in accurate results, and all statistics collected whether at a census or separately must be taken *cum grano salis*.

The Provincial and State Governments have supplied us statistics of weavers classified under full-time and part-time weavers and assistants paid and unpaid. The table below incorporates the data thus collected :—

TABLE XI—*Number of weavers.*

Province or State.	Weavers (full time).	Weavers (part time).	Total number.	Number of assistants.	
				Paid.	Unpaid.
Assam	2,800 (1%)	418,200 (99%)	421,000	1,000	840,000
Bengal	151,484 (75%)	50,495 (25%)	201,979	113,968	..
Bihar(a)	82,924 (81%)	19,769 (19%)	102,693	1,848	115,551
Bombay	103,300 (88%)	13,800 (12%)	117,100	39,060	312,240
C. P. & Berar	53,895 (75%)	17,495 (25%)	71,390	3,686	139,094
Madras	369,617 (87%)	58,099 (13%)	427,716	(e)	(e)
Orissa	30,000 (60%)	20,000 (40%)	50,000	..	150,000
Punjab	288,499 (81%)	67,355 (19%)	355,854	1,000	349,454
Sind	..	..	4,569	..	..
United Provinces	181,573 (75%)	63,139 (25%)	244,712	..	510,573
Total (British India)	1,264,092	728,352	1,997,013	(d)	(d)
Baroda	5,063 (93%)	375 (7%)	5,438	983	6,519
Cochin	2,450 (100%)	..	2,450	180	1,990
Gwalior	4,072 (70%)	1,752 (30%)	5,824 (1941 Census).	100	597
Hyderabad	92,775 (85%)	16,000 (15%)	108,775	63,119	120,119
Indore	..	..	1,565	..	..
Jammu & Kashmir	..	..	21,788	..	..
Kolhapur & the Deccan States(b)	12,716 (99%)	175 (1%)	12,891	18,313	7,655
Mysore	34,000 (97%)	1,000 (3%)	35,000	..	..
Travancore	19,010	..	19,010	10,000	20,000
Total (States) (c)	170,086	19,302	232,270	..	..
Rest of India (estimated)	..		175,000	(g)	(g)
GRAND TOTAL	1,434,178	747,654	2,404,283	253,257(f)	2,573,792 (f)

(a) Excluding those who have given up weaving.
(b) All States are not included.
(c) Percentage excluding Indore and Jammu and Kashmir.
(d) Figures incomplete.
(e) Madras figure for number of assistants, paid as well as unpaid, is 486,829.
(f) Total of assistants, paid and unpaid, therefore, works out as follows :—
253, 257+2, 573, 702+486, 829+262, 500=3,576,378.
(g) In the "rest of India" our estimate for the number of assistants is 262,500 (1½ times the weavers of it).

It will be seen from the above Table that the total number of full-time weavers are 1,434,178 for the ten Provinces and the seven States of which we have full information. The number of part-time weavers is 747,654 in the Provinces and States mentioned above. It may be noted that only 1 per cent of the total number of weavers in Assam are classed as full-time weavers. For the rest of India we make an estimate of about 175,000 workers, both full-time and part-time. Thus we get a total of 2·4 million weavers for all India. There are besides auxiliary workers who assist them, some paid and others unpaid, and according to our estimates these number about 3·6 millions. Thus for the 2,000,000 handlooms working in the whole of India, there are about 6·0 million workers. In addition to these there are the dependants, whose number cannot be less than 4 millions. Assuming that each of the 2·4 million weavers has to support besides himself three persons on an average, it can be seen that the total population depending on the industry must be round about 10 millions.

33. *Recent trends.*—We have next to consider whether any conclusions regarding the progress or decline of the industry can be drawn from the periodical census statistics. Unfortunately such comparisons are rendered extremely difficult by the various changes in classification from census to census. In 1901, separate statistics were collected for spinning, sizing and weaving. But in 1911, workers of all categories were combined together. In 1921, spinners were separated from sizers and weavers, but in 1931, all were grouped together again. To have done this, especially in 1931, was a serious mistake. All such changes from census to census greatly vitiate the occupational statistics for purposes of comparison. By various adjustments it is possible to get somewhat comparable figures for all India for the period 1901-1931, and in the following table such figures are given for cotton textile industry. The figures thus obtained are for the whole of the cotton textile industry including mills. By subtracting from these the workers in the mills we are able to obtain the number of workers in the cotton handloom weaving industry for the period 1901-1931.

TABLE XII—*Workers in cotton spinning, weaving and sizing.*
(*Figures in thousands*).

Census.	Actual workers (both sexes)—principal and subsidiary.	Workers in cotton mills (spinning and weaving).	Remainder (handloom industry).
1901	3,452·6	172·9	3,279·7
1911	3,137·7	230·6	2,907·1
1921	2,739·5	332·2	2,407·3
1931	2,509·0*	395·5	2,113·5

* In the Census of 1931, the workers were shown as (i) those following the occupation as a principal one, (ii) those following it as a subsidiary one, and (iii) working dependants, separately. On the other hand, in the earlier Censuses (i) total workers, (ii)workers out of those who were partially agriculturist, and (iii) dependants, had been given severally. Therefore, in order to get approximately comparable figures, only workers as principal and subsidiary, excluding working dependants, have been taken for 1931.

Scanning the statistics given above, we cannot resist the broad conclusion that the number of handloom workers has suffered a decline. This is supported by other independent evidence. In the table above, the last column gives, as explained above, the number of workers in the cotton hand-weaving industry. It may be that the decline is accentuated by the rapid decay of hand-spinning during the period (at least till 1921), but the general downward trend is unmistakable, especially as the fall amounts to about 36 per cent between 1901 and 1931.

A comparison of the trends in some of the Provinces and States would have been more useful than all India comparisons, but this is rendered even more difficult by further complications in the Provincial tables. In 1901, figures for workers and dependants were given separately, but in 1911 and 1921 the two categories of workers were combined. In 1931, figures were given for actual workers only, including working dependants. Owing to these changes in the Provincial tables from census to census, comparisons are not possible. Therefore, in the following table, we are giving only the figures from the latest available Census (1931). As the figures given in the Census Report are for workers including those in mills, we have subtracted from them the number of mill workers and have thus obtained the number of handloom workers, separately for cotton, silk and wool.

TABLE XII (*a*).—*Textile workers in India (1931).*

(In thousands)

Provinces, States and Agencies	Cotton spinning, sizing and weaving		Silk spinning and weaving		Wool carding spinning and weaving		Total number of Handloom workers.
	All Workers.	Handloom Workers.	All Workers.	Handloom Workers.	All Workers.	Handloom Workers.	
Ajmer-Merwara	5·2	2·6	..	..	·4	·4	3·0
Andamans and Nicobars	..	..	..	..	..	..	..
Assam	221·9	221·9	1·4	1·4	..	..	223.3
Baluchistan*	·1	·1	..	..	·2	·2	·3
Bengal	186·8	168·8	4·7	3·4	·8	·7	172·9
Bihar and Orissa	168·4	167·8	1·9	1·9	5·7	5·0	174·7
Bombay	281·9	30·6	6·0	4·7	18·4	17·4	61·7
C. P. and Berar	156·3	134·2	5·9	5·9	4·9	4·9	145·0
Coorg	..	..	..	..	..	..	..
Delhi	10·1	..	..	..	·1	·1	·1
Madras	484·9	448·5	34·1	33·8	13·2	13·2	495·5
N.-W. F. Province	10·2	10·2	·3	·3	·6	·6	11·1
Punjab	304·6	302·1	1·2	1·2	2·8	1·4	304·7
United Provinces	401·9	372·4	5·9	5·9	21·9	20·4	398·7
TOTAL	2,232·3	1,868·2	61·4	58·5	69·0	64·3	1,991·0

* Figures for mill workers not available.

TABLE XII-(*a*)—*contd.*

(In thousands)

Provinces, States and Agencies.	Cotton spinning sizing and weaving		Silk spinning and weaving		Wool carding spinning and weaving		Total number of Handloom workers.
	All Workers.	Handloom Workers.	All Workers.	Handloom Workers.	All Workers.	Handloom Workers.	
Assam States*	26·2	26·2	..	..	..	..	26·2
Baluchistan States*	·2	·2	..	..	1·5	1·5	1·7
Baroda	26·0	15·5	·5	·5	·5	·2	16·2
Bengal States*	5·8	5·8	..	..	..	..	5·8
Bihar and Orissa States	72·4	72·4	1·9	1·9	..	..	74·3
Bombay States	33·2	31·3	1·6	1·6	2·6	2·6	35·5
Central India Agency	34·7	21·9	..	..	3·5	3·5	25·4
C. P. States*	31·0	31·0	·2	·2	·4	·4	31·6
Gwalior	31·5	25·1	..	..	·7	·7	25·8
Hyderabad	162·6	158·2	2·4	2·4	18·6	18·6	179·2
Jammu and Kashmir	11·1	11·1	·5	·5	3·4	3·4	15·0
Madras States	23·9	23·2	·5	·5	·2	·2	23·9
Mysore State	43·9	35·5	7·9	7·4	16·9	16·2	59·1
N.-W. F. P.—Agencies and Tribal Tracts.*	·1	·1	..	..	..	..	·1
Punjab States*	37·1	37·1	..	..	1·0	1·0	38·1
Rajputana Agency	132·7	132·3	..	..	2·6	2·6	134·9
Sikkim State*	..	..	..	..	..	..	..
U. P. States*	6·0	6·0	..	..	·4	·4	6·4
Western India States	28·5	27·3	·4	·4	6·4	6·4	34·1
Total (States and Agencies)	706·9	660·2	15·9	15·4	58·7	57·7	733·3
Total—India (including Burma).	3,174·1	2,762·4	123·3	119·9	127·7	122·0	3,004·3
India (excluding Burma)	2,939·2	2,528·4	77·3	73·9	127·7	122·0	2,724·3

N.B.—1. The figures were taken from the 1931 Census and include all earners with principal occupations, total working dependants and total following occupations subsidiary to other.
2. The "handloom workers" were obtained by subtracting "mill workers" from each category of textile workers.
* Figures for mill workers are not available.

In the above table the total number of handloom workers for India (excluding Burma) is given as 2·72 millions. But one wonders how 2·72 million workers could operate 2 million handlooms in view of the fact, ascertained by us, that each handloom, on the average requires one full-time weaver and 1½ part-time assistants. Thus the total number of workers should be at least 5 millions. This means that either many of the looms were not working in 1941 or the number of weavers was underestimated in the Census, or the Census definition of the term "worker" is different from our own. We rule out the last possibility, because it is stated in the Census of 1931 (Vol. I, Part II, page 205) that "those dependants who by working full or part-time help

to augment the family income have been detailed according to the actual occupation by which their assistance is given". However, it is further stated that "the system of classification followed was not entirely consistent in all States and Provinces, necessitating reclassification in some groups as a consequence of which discrepancies will be found.....".

34. *Census for 1941.*—In the Census for 1941, many of the blemishes mentioned above have been rectified, but as stated already, it was decided not to take up for the present the tabulation of the occupational statistics. Thus we have been denied the only complete source of information. The States are under no such handicap and some of them are proceeding with tabulation, but as it is not completed we have not been able to utilize them The Government of Mysore has communicated to us the results so far tabulated and the changes revealed by their statistics are rather significant. Of the eight districts of the State the information for only four has been tabulated. The following Table will bring out the position.

Table XIII.—*Number of families engaged in cotton spinning and weaving and wool spinning and weaving.*

Districts.	Cotton.		Wool.	
	1931.	1941.	1931.	1941.
	Number of Families.		Number of Families.	
Kolar	1,392	858	791	331
Tumkur	1,881	1,320	2,360	1,352
Hassan	873	274	333	36
Kudur	302	80	230	81

It is clear that there has been an invariable decline in the number engaged in the cotton and wool-weaving industries. The Census Commissioner of the State, in a letter to us, observes that this decline is noticeable in nearly every cottage industry. Nor is this decline a recent phenomenon. The total number of persons engaged in spinning and weaving cotton in Mysore was 69,500 in 1871; by 1931, it fell to 35,000 and there has been a further fall since.

The only other Indian State, about which similar information is available at the moment of writing, is Gwalior. In this State, according to the latest Census, the number of people supported by handloom weaving is 19,529. This is about 6,000 less than the number supported in 1931, which indicates that there has been a decline of about 25 per cent in the past ten years.

iii. Powerlooms.

35. *Powerlooms.*—We have found it extremely difficult to collect statistics of powerlooms. A number of estimates were received from different sources regarding the actual figures. However, so far as we have been able to gather, there are about 11,640 powerlooms in the Provinces and States

which have given figures, and of these 6,350 or more than half (55 per cent) are in the Bombay Presidency. Next to Bombay, come the Indian States. Mysore with 1,300 powerlooms, and Kolhapur States with 1,311 powerlooms. The Punjab, and C. P. and Berar come next with 1,169 and 745 powerlooms, respectively. A few hundreds of powerlooms are scattered over the Madras Province (270), Hyderabad (240), Baroda (109) and Bihar (104). As indicated in Appendix VIII the figures for cotton weaving powerlooms, as well as others, appear to be somewhat underestimated. Both for this and the fact that certain States have not given figures, we make an addition of 3,360 powerlooms bringing the estimated total to 15,000 for all India.

Of the total number of powerlooms in India (excluding 745 in Central Provinces and Berar for which no classification according to textile is available), 58 per cent are engaged in cotton weaving, 16 per cent in artificial silk, 14 per cent in silk, 8 per cent in mixtures and 3 per cent in wool. In Bombay, Madras and in the Kolhapur and the Deccan States, powerlooms are engaged largely in cotton weaving. Silk and silk mixtures predominate in the Punjab and Baroda, while silk and artificial silk figure prominently in Mysore. All this can be seen from Table XIV below.

Table XIV.—*Powerlooms classified according to the textile used.*

Province or State.	Cotton.	Wool.	Silk.	Artificial Silk.	Jute or other fibres.	Mixture.	Total.
1. Assam . . .	9	..	..	..	..	..	9
2. Bengal . . .	16	..	..	..	..	..	16
3. Bihar . . .	..	..	..	60	..	44	104
4. Bombay . . .	4,225	..	1,000	1,025	..	100	6,350
5. C. P. and Berar . .	..	..	..	..	..	..	745
6. Madras . . .	210	..	45	..	..	15	270
7. Orissa . . .	..	..	..	..	..	..	..
8. Punjab . . .	109	330	..	430	..	300	1,169
9. Sind	..	..	..	..	..	..	..
10. U. P. . . .	..	..	..	..	..	..	..
11. Baroda . . .	3	..	..	25	6	75	109
12. Cochin . . .	..	..	..	..	..	..	..
13. Gwalior . . .	..	..	..	..	..	..	..
14. Hyderabad . .	..	..	..	..	..	240	240
15. Indore . . .	..	..	..	..	..	..	..
16. Jammu and Kashmir .	..	..	..	..	..	..	..
17. Kolhapur and the Deccan States.	1,189	..	..	..	..	122	1,311
18. Mysore* . . .	600	..	500	200	..	..	1,300
19. Travancore . .	17	..	..	..	..	..	17
Total .	6,378	330	1,545	1,744	6	896	11,640

* Cotton and artificial silk combined . . . . . = 600 looms.
Assuming ½ artificial silk . . . . . = 200 looms.

iv. A SURVEY OF THE CENTRES OF PRODUCTION.

36. *Principal centres of production.*—We now propose to give a bird's-eye view of the handloom weaving centres in India. In Table XV below, we give figures showing the density of distribution per 1,000 sq. miles of handlooms, district by district in the Provinces and States. It would appear that the highest density is to be found in the Provinces of Madras, the Punjab, United Provinces and Assam, while Bengal and Bombay follow in close proximity. The high density of Assam, however, must be somewhat discounted in view of the fact, noted in Chapter IV, that the looms there are very small and production is desultory.

TABLE XV.—*The density of the distribution of handlooms in India.*

Province or State.	Above 5,000 handlooms per 1,000 sq. miles.	Number of Districts having		
		between 2,501-5,000 handlooms per 1,000 sq. miles.	between 1,001-2,500 handlooms per 1,000 sq. miles.	between 0-1,000 handlooms per 1,000 sq. miles.
1	2	3	4	5
Provinces.				
Assam	7	1	3	1
Bengal	1	8	9	9
Bihar	..	1	8	7
Bombay	..	4	5	9
C. P. and Berar	..	1	3	15
Madras	4	10	9	2
Orissa	..	3	2	1
Punjab	4	5	12	8
Sind	..	..	..	8
U. P.	3	11	19	15
States.				
Baroda	..	..	1(a)	..
Cochin	..	..	1(a)	..
Hyderabad	..	3	6	8
Jammu and Kashmir	..	..	4	4
Mysore	..	1	4	4
Sangli	..	..	1(a)	..
Travancore	1	..	..	2

(a) For the State as a whole.

Among the Provinces of India, Madras produces the largest quantity of handloom cloth. Four districts in that Province contain more than 5,000 looms per 1,000 sq. miles; *viz.*, Madras, Chingleput, North Arcot and Salem. Ten other districts contain between 2,500 and 5,000 looms. The most celebrated centre of Madras in former days was Masulipatam with its extensive external trade in chintzes (printed calico) dating from ancient times. Its *kalamkaris* had for long been esteemed in Persia, and the East Indian Company carried on a lucrative trade in them. After the decline of this trade Masulipatam took up *lungi* manufacture for export, but this has also had a setback by the competition in export markets of cheaper mill made *lungis* from Japan. Pedana, near Masulipatam has adjusted itself to the production of saris of various designs and it continues to be an important weaving centre. The neighbouring district of Guntur contains some prominent weaving centres like Chirala, Guntur and Mangalgiri noted for medium-count saris and dhotis. In the East Godavari District, Uppada, Peddapuram and Mori are famous for their superfine coloured saris of counts ranging from 80s to 150s. The handloom weaving industry of Vizagapatam has declined, but Pondur and Bonthalakodur in that district produce perhaps the best handspun and hand-woven cloth in the whole of India with counts up to 80s. In the Ceded Districts, Dharmavaram is noted for its silk fabrics, Adoni for its cotton carpets and common saris, and Jammalamadugu for a wide variety of cotton fabrics. In the Tamil Districts, Salem takes the first place with its high-class coloured saris and dhotis. Madura has become a by-word throughout India for fine multi-coloured saris of up-to-date designs, highly suitable for the daily wear of middle-class women. Coimbatore, once chiefly a turban-weaving centre, has lately become noted for fine saris of attractive colours and elegant designs. Conjeevaram and Kornad had a great name formerly, the former for its high-class silk saris, and the latter for its coloured cotton saris with silk borders. The importance of Kornad has declined with the change of fashions among South Indian women, but Conjeevaram still continues to be a large weaving centre. Aruppukottai, Melapalayam and Ambasamudram produce large quantities of artificial silk saris for export to Ceylon and Malaya. Arni, Washermanpet (Madras), Madarpakkam and Sulurpet specialise in Madras handkerchiefs for export. Similarly Melapalayam, Saidapet, Gudiyattam and Conjeevaram specialise in *lungis* for export to outside markets. The chief centres in the South Kanara and Malabar Districts,—Mangalore, Cannanore, Tellichery and Calicut,—contain numerous *karkhanas* engaged in the production of shirtings and coatings.

In the State of Travancore, Nagercoil (including Kottar and Vadaseri) Eranial and Balaramapuram are important weaving centres. Kuthampilly in the Cochin State has also a large weaving population.

In the Mysore State, Bangalore City and Dodballapur are well-known for their silk and cotton saris, while Jangamkote and several centres in the districts of Kolar, Tumkur and Mandya produce cotton saris and dhotis.

The Nizam's Dominions contain a large number of important weaving centres mostly in the Telugu-speaking area. The chief among them are Paithan and Aurangabad noted from early days for high-class fabrics like

himru and brocade. Narayanpet, Nizamabad and Sangareddy are important centres of silk weaving, while Hanamsagar, Tawargara and other places in the Raichur District produce high-count cotton saris of the Ilkal type.

Four districts in the Bombay Province,—Surat, Sholapur, Bijapur and Dholka,—contain between 2,000 and 4,000 looms per 1,000 sq. miles. In this Province the best known centres are in Karnatak and Maharashtra. Ilkal and Belgaum are famous for saris of silk and cotton mixtures, Guledgud for fine *khans*, and Bijapur for woollen *kambals*. In Kolhapur and in the States of the Kolhapur Agency (especially Sangli), there are important weaving centres like Rabkavi, Shahpur and Mahalingapur. Ichalkaranji is famous for its rising powerloom industry. Sholapur, the largest and best organised hand-weaving centre in the Province, has successfully adjusted its production to modern requirements in saris. Malegaon and Bhiwandi have lately become centres of powerloom weaving, and are advancing in the production of saris with up-to-date designs. Ahmednagar has still a large weaving population, engaged in making saris of medium counts. Poona has declined as a hand-weaving centre as there is no longer any great demand for its lace-bordered saris. Sangamner, Dhulia and Yeola are also important hand-weaving centres. Hand-weaving in Gujarat has been on the decline for some time. The *kinkhabs* of Ahmedabad and Surat, and *baftas* of Broach were once very famous. Surat is still a prominent weaving centre with a large number of powerlooms and semi-automatic looms. Dholka continues to make lace-bordered saris with silk and cotton, but the number of weavers has declined.

In Baroda, Gwalior, Indore and in the many States of Central India and of Kathiawar and the Rajputana Agency, handloom industry has had a noticeable decline in the last few decades. The chief centres in Baroda are Patan, well known for *potolas*, Dabhoi formerly noted for turbans, and Baroda itself which is now becoming prominent as a centre of printed fabrics. Maheswar in the Indore State has been for long famous for saris of fine gold-thread and silk texture with elaborate designs in body and border. Chanderi in Gwalior is still famous for silk *shalus*, turban cloth and other high class fabrics.

The handloom industry in Sind is confined to a few centres, of which Karachi producing *susi* cloth and *angochas* (towels), and Tatta, producing *lungis*, *khes* cloth and *chaddars* are the chief.

Six districts in the Punjab (*viz.*, Hoshiarpur, Jullundur, Ludhiana, Amritsar, Gurdaspur and Sialkot) contain more than 4,000 looms per 1,000 sq. miles. The most important hand-weaving centre in the Punjab is Amritsar, famous for its mercerised cotton and artificial silk coatings and shirtings. Next come Multan, which has a great reputation for silk fabrics, *daryae*, etc.; Ludhiana, which produces large quantities of *pashmina* and shawls; Hoshiarpur, which is noted for plain and striped *boskis* and cotton head-lungis; Panipat, which is famous for woollen blankets woven out of hand-spun yarn; and Ambala, chiefly known for its *khaddar* cloth.

Five districts in the United Provinces (*viz.*, Bijnor, Moradabad, Jalaun, Benares and Azamgarh) have more than 4,000 looms per 1,000 sq. miles and fourteen districts between 2,000 and 4,000 looms. There are many important centres scattered about the Province engaged in the production of speciality fabrics. First and foremost is Benares whose silk saris are a

house-hold name in India, much sought after in marriage seasons. It has a large and highly skilled weaving population plying about 25,000 looms. Other centres are Mirzapur, famous for woollen carpets; Bijnor producing *garha* and other cotton fabrics; Farukkabad well-known for cotton printing; Mau Ranipur which supplies many kinds of fabrics; Fyzabad, noted for *jamdani* cloth, *malmal* and other cotton and artificial silk fabrics; Barabanki, a large weaving centre; Agra city well-known for *durris* and carpets; and Meerut which makes *khaddar* cloth and *durris*.

The hand-weaving industry in Bihar is widely scattered in rural areas, especially among the hill tribes. The principal centres in the plains are Bhagalpur, formerly noted for tassar silk but now producing artificial silk fabrics, Darbhanga, Madhubani and Bihar Shariff famous for a wide variety of plain cloth of Indian cotton yarn of coarse and medium counts.

In Bengal four districts, *viz.*, Dacca, Noakhali, Hooghly and Howrah, contain more than 4,000 looms per 1,000 sq. miles, while seven other districts contain from 2,000 to 4,000 looms per 1,000 sq. miles. The most famous centre of Bengal in days gone by was Dacca whose flowered muslins, made of yarns up to 500 counts, enjoyed a world reputation. The jamdani saris of Dacca are still famous all over India. Next to Dacca is Santipur, which is associated with the production of superfine saris with lovely borders of gold and silver lace. In spite of many vicissitudes, Santipur still maintains its reputation among the discerning women-folk of Bengal and Bihar. Tangail (Mymensingh) which produces saris and dhotis with matka and jari borders, Rajbalhat (Hooghly) and Abdullapur (Dacca) are also noted centres of high-class weaving. Perhaps the largest centre of cloth production in Bengal to-day is Madhobdi which has been called the "Manchester of Bengal", as it produces a large quantity of saris, lungis, dhotis and towels for the common people. The weekly *hat* (market) at Madhobdi is perhaps the biggest of its kind throughout India. Cloth of popular modern styles is made also in Dhanyakali, Enayatpur and Shahajadpur. Other well-known centres in Bengal are Murshidabad and Bishnupur, specialising in the production of silk saris and mixed silk and cotton saris; Farasdanga noted for fine dhotis; Chaumuhani which produces many varieties of cheap fabrics; and Bankura, noted for *chaddars*.

There are several hand-weaving centres scattered about the Province of Orissa. The principal centres are Berhampur, famous for silk saris; Sambalpur and Barpalli engaged in making saris, *chaddars*, coatings and shirtings and Thakurpatna, where saris with figure-work on border are made.

The handloom industry of C. P. and Berar is in a fairly good condition and can claim many important centres. The silk and cotton fabrics of Burhanpur were formerly considered second only to those of Dacca and were enjoying a large export trade. Nagpur is to-day a thriving centre of sari production. Umrer makes dhotis and *uparnas* with silk borders and without. Chanda is engaged in the manufacture of pure and mixed silk saris and *pagris*, etc. Elichpur, which has long been famous for its carpets and khadi, now makes plain and fancy saris with silk mercerised or artificial silk borders.

In Assam, hand-weaving is scattered all over the Province. There are also centres like Sualkuchi, specialising in silk goods, and Karimgunj making chiefly cotton goods, while other centres are Sylhet, Palasbari, Gauhati and Sapatgram.

CHAPTER III.

Statistics of Handloom Production.

37. *Difficulties of Statistical Estimation.*—We now propose to deal with the total production of cloth on the handloom. This is perhaps a better index of the progress of the hand-weaving industry than the number of looms and weavers. Further, it is an integral part of the national dividend of this country and a measurement of it is essential from many points of view. But the available statistics are inadequate for making a proper estimate. In the case of mills and other large-scale establishments, statistics are collected by the Government, through certain periodical returns which have to be submitted by these concerns, but this is not possible in the case of an unorganised industry like hand-weaving pursued in small units scattered about all over the country. Even in the case of unorganised industries a periodical census of production is possible, but there are insuperable difficulties for this, especially in India, where small-scale producers hardly keep any accounts and are not accustomed to answer questionnaires or submit returns. A census of production is, therefore, possible in India only if thousands of investigators work throughout the country for at least a year. The cost of such a venture is prohibitive and even then the results may not be commensurate. In these circumstances we have to fall back upon estimating production in some other way, utilising such data as are available.

Production in the hand-weaving industry can be expressed in three different ways :—(*a*) in terms of the total quantity of yarn consumed in the industry, (*b*) in terms of yardage or weight of cloth, and (*c*) in terms of the value of cloth. Each of these has its special uses, and all these methods have been utilized in this Chapter so far as possible. With the data submitted by the Provincial and State Governments, we are able to make an all-India estimate of cloth production on handlooms on the basis of both yardage and value. In fact, we have two independent estimates of yardage, one supplied by the Provincial and State Governments and the other our own, calculated on the basis of the number of loom-hours worked per year. Unfortunately, however, the data available are not helpful in getting any idea of production in the previous years, and as a quantitative knowledge of production in previous years is essential for finding out how the hand-weaving industry has fared in the past, we have been forced to look to yarn consumption as the chief method to be employed. Such an estimation is possible in the case of the cotton mill-spun yarn used by the handlooms in the last forty years. If the amount of yarn used by the handlooms can be found, it can be easily converted into yardage. It may also be noted that this method has been employed by the Tariff Board as well as by Millowners' Assoications in the past for estimating the handloom production, and naturally this claims our first attention. However, we have not limited ourselves to this method ; we have supplemented it by pursuing other independent methods also, as will be seen from the following paragraphs.

i. Estimate of cotton yarn used by the handloom industry.

38. *Data available.*—The bulk of the hand-weavers in India are engaged in cotton weaving, and they mostly use Indian mill-spun yarn. Therefore, if we can find out the total amount of mill yarn going into the handlooms,

we will have a fairly accurate estimate of the production on the handlooms engaged in cotton weaving. Unfortunately no statistics are maintained about the yarn that goes into the handlooms nor even of the yarn used in the mills themselves. We have indeed statistics of (1) total yarn spun in the mills, (2) imports and exports of yarn, and (3) total production of cloth in the mills. But even the amount of yarn consumed by the mills is not given; it has to be estimated. Therefore, in order to find out how much yarn goes into the handlooms, we must first obtain the total amount of mill yarn available for consumption in India, *i.e.*, production in Indian mills *minus* exports *plus* imports. We have then to estimate the amount consumed in the Indian mills. The balance is what we may call the 'free' yarn available for the handlooms. We may then find out how much of this yarn actually goes into the handlooms. This is by no means easy, because while we know that no inconsiderable portions of it have been going into hosiery works and small-scale powerloom factories and certain non-textile uses, there are no reliable statistics of them. Having obtained the weight of yarn going into the handlooms we will have to convert this into yardage. Thus there are three stages in this process, namely, (1) estimation of the total yarn available in India; (2) estimation of 'free' yarn, *i.e.*, yarn left after consumption by the mills, and (3) estimation of the yarn actually going into the handlooms and its conversion into yardage.

Of the three steps mentioned above, the first is not very difficult. The data needed for this are available in the periodical publications of the Director-General of Commercial Intelligence and Statistics, *viz.*, the *Monthly Statistics of Cotton Spinning and Weaving*, the *Classified List of Cotton Goods Produced*, and the *Monthly Sea-borne Trade Statistics*. With the help of these, we could find the total yarn available for consumption in India. The total quantity of mill yarn available in India consists of (1) yarn spun in Indian mills, (2) imported yarn. From this total, we have to deduct (3) the quantity of yarn exported and re-exported from India by land and sea. Thus we arrive at the total balance of yarn available for consumption in India. In our estimates, data for these have been obtained from the above-mentioned publications.

39. *Shares of mill-spun yarn.* (*a*) *Mills.*—The next step is to see how much of this yarn is used up in the mills. In 1916, the Millowners' Association, Bombay, estimated the yarn consumed by the mills on the assumption that 100 lbs. of yarn used in weaving give a cloth production of 112 lbs. The 12 lbs. represents the extra weight added in the sizing and finishing processes. On this basis, by multiplying the weight of cloth in pounds by 100 and dividing it by 112, we get the weight of the yarn which goes to the making of these cloths. This computation was accepted by the Indian Industrial Commission of 1916-18. The Tariff Board on the Cotton Textile Industry, 1932, held that with the improvement of the quality of Indian production, *i.e.*, higher counts of yarn being used in greater proportion than before, the weight after sizing would have fallen below 12 lbs. The Millowners' Association, Bombay, agreed with this view of the Tariff Board and suggested that a more correct basis would be 110 lbs. of cloth for 100 lbs. of yarn. But this modification was not carried out then, as it was feared that it would create difficulties in regard to comparison with earlier figures. Having regard to the shift from lower to higher counts, the recommendation of the Tariff Board as supported by the Millowners' Association, Bombay, will have to be given effect to. But

as the change became striking only in recent years we propose to apply the new ratio only from 1931-32. Thus, from that date, the ratio applied in our tables is 110 lbs. of cloth to 100 lbs. of yarn. In this connection, we invite a reference to Appendix XV where we have elucidated the methods adopted for estimating the relation between weight of yarn, yardage of cloth and weight of cloth, both for mill and for handloom production.

Before making this conversion of mill cloth into yarn, we have to make certain adjustments in the items of mill cloth, as classified in the *Monthly Statistics of Cotton Spinning and Weaving in Indian Mills*. We will take into consideration for this purpose (*a*) grey and bleached piecegoods, (*b*) coloured piecegoods, (*c*) grey and coloured goods, other than piecegoods. The remaining items (*d*) hosiery, (*e*) miscellaneous goods and (*f*) cotton goods mixed with silk and wool cannot properly be entered into this calculation. In the case of both hosiery and miscellaneous (tape, *niwar*, cords, etc.), the production figures entered here are only those of factories coming under the Factories Act; but, in both these cases, a great deal of production goes on in small units and as will be explained they must be grouped into one class and must form separate items in our table. As regards "cotton goods mixed with silk and wool", the proportion of cotton yarn in such goods is very small and we omit this item altogether. The omission, if anything, will mean that to this extent consumption of yarn in the mills will be shown as being less and that of handlooms as being more, but the error involved is small and negligible. The quantity of mill yarn thus obtained by conversion from mill will be deducted from the total yarn, and thus we get the 'free' yarn available for handlooms and other purposes.

(*b*) *Other sharers.*—The third step is the most difficult, and raises complicated issues. The greatest difficulty arises from the fact that the handloom is not the residuary legatee of all the 'free' yarn available after meeting the demands of mills. A certain quantity of this yarn goes into non-textile uses,—braid, ropes, fishing nets, lamp wicks, pyjama cords, bandages, etc. In recent years, a steadily growing quantity of the 'free' yarn has also been going into the powerlooms established in single units or in small workshops and into small hosiery works. A smaller quantity has also been used in the jute mills. Had we possessed complete statistics of all these textile and non-textile uses of mill-spun yarn, it would have been easy to estimate the amount of yarn going into the handlooms, but unfortunately such statistics do not exist. In the case of powerlooms and hosiery works, the bigger ones come under the Factories Act, and the yarn consumed by them is accounted for, but the bulk of such works are small and their statistics do not reach the Department of Commercial Intelligence and Statistics. Therefore, the large quantities of yarn now consumed by them are wrongly believed to fall to the share of the handloom industry, and this unnecessarily swells the yarn consumption of the handloom industry. In these circumstances, the only step open to us is to first estimate the quantity of yarn going into the above textile and non-textile uses, and to assume that when all these are subtracted from the 'free' yarn, the residue of the yarn goes into the handlooms.

40. *Earlier estimates.*—Before attacking this problem, we propose to discuss briefly the earlier estimates and methods of computation adopted by certain authorities on the subject. One of the earliest estimates was the one made by the late Sir Vithaldas Thackersey in a paper which he read at the First

Industrial Conference in 1905. From the total quantity of yarn produced in India and imported from abroad, he deducted the quantity of yarn exported as also the quantity of yarn consumed in Indian mills. From this balance of "free yarn" available for sale, he made a further deduction of 10 per cent for rope and twine. The final residue, according to him, was available to the handloom industry.

In 1926, Mr. R. D. Bell, then Director of Industries, Bombay, went into this matter more fully in a bulletin, entitled *Notes on Indian Textile Industry with special reference to Hand-weaving* (No. 6 of the Department of Industries, Bombay). He admitted that a deduction was necessary from the "free yarn" on account of non-textile uses like rope and twine, but held that the amount of such yarn was not large and might be offset against the quantity of hand-spun yarn which was used on the handlooms.

In 1932, the Tariff Board in their *Report* (para. 22) considered it arbitrary to offset the hand-spun yarn consumed by the handlooms against the mill-spun yarn used for non-textile purposes, on the ground that "mill yarn is used in considerable quantities for such purposes as the making of hosiery, braid, ropes, nets, lamp-wicks, bandages and pyjama cords and it was impossible to form an even approximate estimate of the total amount of yarn absorbed in this manner". Nevertheless, in making their own estimates, the Tariff Board (para. 162) made precisely the assumption which they had rejected earlier and offset the "production of hand-spun yarn" against mill yarn "used for domestic and non-textile purposes". Thus, out of 365 million lbs. of 'free' yarn available for extra-mill consumption in 1931-32, they deducted 24 million lbs. (equivalent to the amount of hand-spun yarn produced, according to their estimate) and the balance of 341 million lbs. was estimated by them as the handloom consumption of mill yarn during 1931-32. Thus the result was the same as was arrived at by Mr. Bell.

After a full consideration of the matter, we have come to the conclusion that it is not desirable to offset the hand-spun yarn coming into handlooms against the mill-spun yarn going out into "other textiles" and "non-textile uses," because there is no necessary quantitative relation between them. For one thing, there is reason to think that while the quantity of hand-spun yarn has been diminishing or stationary, the quantity of mill-spun yarn going into powerlooms and hosiery works has lately been increasing rapidly. For instance, hosiery, which consumed hardly 1 million lbs. of yarn in 1919-20, took 22·6 million lbs. in 1938-39 (See Appendix VII). Similarly, powerlooms hardly consumed 1 million lbs. in 1931-32; the estimated consumption was 8·9 million lbs. in 1938-39 (See Appendix VIII). A reference to Table XVIII (below) will show that the proportion of yarn as percentage of the "free" yarn going into "other textiles" and "non-textile uses" has grown from 6 per cent. in 1900-5 (average for the quinquennium) to 8 per cent in 1925-30 and 11 per cent in 1938-39. The deduction of a uniform percentage on account of non-textile uses might have been adequate at the time when Sir Vithaldas Thackersey and others made their estimates, but the position has considerably changed since, owing largely to the great expansion of the small powerloom units and the hosiery industry.

We are also convinced that it would be best not to bring hand-spun yarn into this computation. For the purpose of our enquiry we propose to segregate the data for hand-spun yarn production and consumption for separate

treatment. The data for mill-spun yarn and its consumption for various purposes are comparatively more definite, while those for hand-spun yarn are largely statistical speculations. Moreover, it is not possible to get any chronological figures for hand-spun yarn over a number of years as in the case of mill-spun yarn. For these reasons, we feel justified in presenting the reliable part of the available material here. (The question of hand-spun yarn, its production and consumption, has been dealt with in Appendix XXVI.) However, hand-spun yarn cannot altogether be ignored. In arriving at an estimate for the total production of the handloom industry at present or rather prior to the war, we shall make due allowance for handloom cloth woven out of hand-spun yarn.

Thus in order to obtain the amount of mill-yarn going into the handlooms, we have first to take account of the different sharers in the ' free ' yarn, classified under two main groups as under :—

I. *Other textiles*, including (i) hosiery, (ii) single unit powerlooms and small powerloom factories, (iii) jute mills.

II. *Miscellaneous and non-textile items*, including fishing nets, cotton braid, sewing thread, cotton tape, *niwar*, etc.

What is left after deducting both these items is the yarn that may be available to handlooms.

41. *The residual method of computation.*—Before we proceed, however, it must be stated that in the application of this " residual " method, there is one important complication which has not been given adequate consideration by those who have attempted an estimate of the consumption of mill yarn by handlooms. This is the question of unsold stocks of yarn held by mills and yarn dealers. Such surplus stocks of unsold yarn, in any year, may arise owing to (1) any fall or rise in the demand for yarn relative to any fall or rise in its production in that year, or (2) hoarding of yarn for speculative cornering or in the search for liquidity. It is obvious, again, that fluctuations in the stocks of yarn also may arise owing to changes in the above factors themselves. Three assumptions are possible in this connection, *viz.*, (1) that the stocks have been steady from the commencement of the period for which we have made our calculations, *viz.*, 1900-1, (2) that the stocks have been steadily growing as from that date, and (3) that the stocks have been fluctuating now and then. If the first assumption were correct, it would not have made any difference to our calculations, for the reason that the residue of yarn going to the handloom industry is calculated after deducting the various items mentioned above from the annual production and net imports of mill yarn, and that these latter figures do not include stocks. Thus, the same stock would remain unsold from year to year making no difference to the final result. Unfortunately, however, the first assumption cannot be correct. As may be expected owing to increasing production and imports of yarn, from year to year, the stocks must have been definitely increasing. At the same time, owing to speculative and other hoarding or dishoarding, there must have been considerable fluctuations in the quantity of yarn coming into the market. The consequences of these two facts are firstly, that an increasing quantity of yarn has been actually collected and that this growing excess, over and above the stock of 1900-1, has been wrongly credited to the consumption of the handloom industry; and secondly, that there have been fluctuations in

the yarn consumed by the handloom industry from year to year, which have not been adequately accounted for in the figures given by us. We are not, however, much worried about this second consequence, because fluctuations must be regarded as ironing themselves out over a period and cannot make any subtraction or addition to the total consumption of yarn by the handloom industry over that period. But the case is quite different with the first consequence, *viz.*, that there is a growing error of overestimation in the figures of yarn consumption by handlooms.

It has not been possible for us to obtain figures for the growing stock position of the yarn market from year to year from 1900-1 onwards. We have no doubt, however, that in view of the rising trend of the growth of the textile industry in the country, the stocks must have been steadily rising. Accordingly, in the figures given in this Chapter and in the Appendices, regarding the consumption of yarn and the derived figures based on this, we shall have to make allowance for the above. How much that should be it is not possible to say, for reasons stated already. On the other hand, it is possible, especially, in regard to recent years, to indicate some measure of fluctuation of stocks. In the following table, we reproduce figures for the stocks of cotton yarn, in bales of 400 lbs. unsold as on certain dates and stocked by the mills in several centres. The figures clearly show that the year 1938-39 experienced a sudden jump in the stock position. It appears that in the year 1938-39, there was a considerable increase in the working spindleage and also a lack of response on the part of the market to it. In view of this, we are rather reluctant to attach much significance to the high figures for consumption of yarn and production of cloth by the handloom industry during 1938-39, as shown in the relevant tables.

TABLE XVI.—*Stocks of yarn in mills.*

Date.	(In bales of 400 lbs.)				
	Bombay Mills.	Ahmedabad Mills.	Upper India Mills.	South India and Madura Mills.	TOTAL.
31st March, 1938 . .	20,000	992	1,282	2,560	24,834
31st March, 1939 . .	38,000	2,369	5,164	23,941	69,474
31st March, 1940 . .	17,000	2,155	3,170	24,568	46,893
31st March, 1941 . .	20,000	1,136	732	13,085	34,953

Before we conclude this section, we may make a reference to paragraph 203 in Chapter XI, where we have stated that it might be possible to collect statistics regarding the consumption of yarn by different parties through the agency of licensed yarn-dealers. If that measure is adopted it may be possible to avoid the above difficulties of the residual method.

42. *Group I : Hosiery, powerlooms and jute mills.*—Subject to the above remarks, we may proceed to make our calculations on the "residual" method. There are no reliable statistics available for the quantities of yarn consumed in the several industries mentioned in the two groups, "other textiles" and "miscellaneous and non-textile," mentioned above. We have, therefore, to utilize such data as are available in estimating them. This we have done in Appendices VII to XIV. Here we shall deal with the salient points of these calculations. (i) *Hosiery :* The Director-General of Commercial Intelligence

and Statistics publishes, in his *Monthly Statistics of Cotton Spinning and Weaving*, figures for the production of hosiery by weight and dozens. But these figures are admittedly incomplete, inasmuch as they refer to production only in the large-scale factories covered by the Factories Act, and the small works which are quite numerous and scattered all over the country especially in Bengal, the United Provinces and the Punjab are totally excluded. Secondly, the figures are based on returns supplied by factories only in a few Provinces and States, while there is reason to believe that even the returns made are incomplete and inaccurate. The hosiery yarn supplied by the Madura Mills alone is greater in quantity than the total quantity of hosiery produced according to the official figures. For reasons explained fully in Appendix VII, we have assumed that the smaller and unaccounted factories produce on the average twice as much as the quantity stated to be produced in the official publication. We have taken care to see that this ratio fits satisfactorily into the situation created by the cessation of imports and a steady rise in the consumption of hosiery products in the country. The estimates arrived at according to this basis of computation have been checked by reference to other independent calculations. It will be seen by reference to Appendix VII that the production has risen from 14 million lbs. to 24 million lbs. during the period 1934-35 to 1939-40. This rapid rise is no doubt due to the protection obtained by the industry in 1934. (ii) *Powerlooms:* The estimate regarding the consumption of cotton yarn by the powerlooms has presented still greater difficulties. These small-scale producers are not required by law to make returns of their production and, moreover, several hundreds of them are operating in State jurisdictions. Further, a large number of them, especially in the Punjab, Surat and Mysore, consume silk and artificial silk yarns. We have had, therefore, to take into consideration only those powerlooms which are devoted to the production of cotton goods. The total number of powerlooms in India, using cotton yarn on a full-time basis, is at present in the neighbourhood of 8,000. There are also about 1,000 powerlooms devoted to the production of mixtures. We assume that the cotton yarn used by them is 90 per cent of the total yarn absorbed. This means that for the purpose of cotton yarn consumption, they are equivalent to 900 powerlooms. Thus, we can regard the total number of powerlooms using cotton yarn as 8,900. We have been told, and we have verified this by reference to independent data, that the average annual cotton yarn consumption of a powerloom is about 1,000 lbs. Thus, the present consumption of powerlooms may be estimated at 8,900,000 lbs. The emergence of the cotton powerloom is a comparatively recent phenomenon dating mainly from the last depression. We have, therefore, assumed that prior to 1930-31, powerloom consumption of cotton yarn was negligible. We have graded the figures for the intervening years by reference to the figures supplied by the Madura Mills for yarn sold by them to weaving mills, because this yarn has been largely sold to powerlooms. A table showing the classification of powerlooms according to the textile used has been given in Appendix VIII. (iii) *Jute mills:* Cotton yarn consumption by jute mills is a small but growing item. In the absence of definite figures, we have taken the Madura Mills' figures for the supply of yarn to the jute mills and added 25 per cent for yarn supplied by other spinning mills. In 1938-39, the consumption on this account stood at 0·77 million lbs. (See Appendix IX.)

43. *Group II. Miscellaneous and non-textile uses.*—With regard to the consumption of cotton yarn for miscellaneous and mainly non-textile purposes, no figures are available for fishing nets, cotton braids, cotton sewing, etc., while only partial data are known about cotton rope and twine, cotton tape, *niwar*, etc. We have had, therefore, to make certain plausible assumptions in each case. (*a*) Cotton yarn used in the production of fishing nets has been computed by reference to the number of actual workers engaged in fishing at the four Censuses of 1901, 1911, 1921 and 1931. We have assumed a consumption of 9 lbs. of cotton yarn per worker and that one out of two workers possess nets on the basis explained in Appendix X. Further, we have assumed that the 1901 figure is good for the decade beginning with 1910-11; and so on. For the last decade, the total consumption of cotton yarn on this account amounts to nearly 4·4 million lbs. We have checked this figure by reference to data supplied by some of the Provinces and States. Thus, the total of estimated annual consumption of yarn for fishing nets in recent years in Assam, Bengal, Bihar, Madras, Punjab and Cochin is 2·7 million lbs. We have assumed that nearly 75 per cent of this quantity is consumed in the other maritime and inland areas, which brings the total for the country as a whole to 4·7 million lbs. (*b*) As regards cotton rope and twine, we have accepted the estimate of Mr. Sankalchand G. Shah of Bombay that cotton rope and twine correspond to nearly 25 per cent of the total production of yarn in counts, 4s, 5s and 6s in India. On this basis, it would appear that the consumption on this account was in the neighbourhood of 5·9 million lbs. in 1938-39. (See Appendix XI.) (*c*) For cotton tape, *niwar*, cords, etc., we have taken the official figures for the heading " miscellaneous " in the publication *Monthly Statistics of Cotton Spinning and Weaving*, and as these figures include only the production of large-scale factories, we have added an equal quantity for the smaller factories. The total estimated quantity for the year 1938-39 for this item was 14·4 million lbs. (See Appendix XII.) (*d*) As regards cotton braids, we have taken the estimate made by the Tariff Board in their Report on the Cotton Textile Industry in 1932 as applicable to the year 1931-32. According to the Tariff Board in that year the Indian production was about 150,000 lbs. Our latest estimate, based upon partial data supplied by some of the Provinces and States is 1·2 million lbs. for 1938-39. The year 1934-35 is significant in this connection as the turning point in the growth of the industry; so we assume that up to that year production stood at 150,000 lbs. or roughly 0·2 million lbs. only and thereafter increased at a steady rate to 1·2 in 1938-39. (See Appendix XIII.) (*e*) The most difficult calculation has been that regarding cotton yarn consumed in cotton sewing, darning, embroidery crochet, boots and shoes, padded goods like quilts, *razais*, etc., and in sundry trades, like lampwicks, bandages, pyjama cords, flower garlands, toys, leather goods, electrical goods, etc. Here the major part is consumed in the sewing, darning and embroidery trade. The total amount consumed for this, according to estimates based upon data supplied by some of the Provinces and States, was 4·3 million lbs. in 1938-39. We have estimated the consumption of yarn for quilts, *razais*, etc., on the basis of population figures, assuming that 10 per cent of the population uses such padded goods. The consumption on this account amounted to 0·9 million lbs. in the last decade. Further, we have taken the numbers of tailors and milliners as shown by the Censuses of 1901, 1911, 1921 and 1931 and calculated that the consumption per worker amounts to about 1·75 lbs. per annum. Accordingly, the total

consumption for this comes to 1·3 million lbs. Similarly, we have calculated that the consumption of cotton yarn per worker in the boot and shoe trade is 3 lbs. per annum, and have multiplied this by the number of actual workers engaged in the trade in the four Census years. Our estimate in this regard comes to 2·6 million lbs. for the last decade. Adding up the three figures, we get 4·3, 4·4, 4·4, and 4·8 million lbs. respectively for the four Census years of 1901, 1911, 1921 and 1931. We have made a further allowance of 10 per cent of these figures for the remaining sundry trades, bringing the figures respectively to 4·7, 4·8, 4·8, 5·3 million lbs. From these figures, we have subtracted the figures for imports of "thread sewing or darning", in view of the fact that such thread is excluded from the imports of yarn which we have taken into account in totalling up the available yarn in India. Towards the end of Appendix XIV, a Table is appended showing the order of magnitude of such imports.

44. *Consumption of yarn by the handloom industry.*—After deducting consumption of yarn by the industries comprised in the above two groups, the balance may be regarded as available for consumption to the handloom industry, subject, of course, to the proviso that some of this yarn may be held in stocks by speculators or hoarders. In the following two tables, we have given figures in summary form, as triennial averages, as these are likely to show the trend of the progressive figures better. Table XVII, which is a triennial summary of Appendix XVI, shows the steps by which we arrive at the "free yarn" available for sale in the Indian market. Table XVIII, which is based on Appendix XVII, shows the net balance of yarn "available" for the handloom industry as a residue.

We have excluded Burma in our figures for handloom weavers in Chapter II (unlike the Tariff Board, 1932) owing to the separation of Burma from India. In connection with the yarn figures, however, it is not possible for us to exclude Burma prior to 1936-37, although from 1937-38 onwards, it is automatically excluded in view of the fact that the official figures regarding production and imports of yarn excluded Burma from that year onwards. But we may mention at the same time that the amount of cotton yarn produced, or imported, or consumed in Burma is very small, silk yarn being largely in vogue there; and hence that the inclusion of Burma up to 1936-37, and exclusion thereafter do not make much difference to our official figures or to the conclusions based thereon.

TABLE XVII.—"*Free yarn*" *available for sale after deducting yarn consumed by mills (triennial averages).*

(In million lbs.)

Year.	Imports of yarn.	Indian Mill production of yarn.	Exports including re-exports.	Balance of yarn available for consumption in India.	Yarn consumed by mills.	"Free yarn" for sale.
1900-03 . . .	36	501	224	312	101	211
1903-06 . . .	32	613	279	369	135	234
1906-09 . . .	39	650	245	444	162	282
1909-12 . . .	38	621	201	458	220	238

TABLE XVII.—*"Free yarn" available for sale after deducting yarn consumed by mills (triennial averages)*—contd.

(In million lbs.)

Year.	Imports of yarn.	Indian Mill production of yarn	Exports including re-exports.	Balance of yarn available for consumption in India.	Yarn consumed by mills.	"Free yarn" for sale.
1912-15 . . .	49	674	197	529	248	267
1915-18 . . .	30	688	181	536	329	204
1918-21 . . .	33	637	142	535	326	209
1921-24 . . .	54	672	115	611	358	253
1924-27 . . .	52	737	78	712	430	281
1927-30 . . .	47	764	37	774	459	314
1930-33 . . .	35	950	32	953	581	372
1933-36 . . .	37	994	21	1,010	638	372
1936-39 . . .	29	1,172	30	1,171	759	412

TABLE XVIII.—*The net balance of yarn "available" to handlooms.*

(In million lbs.)

Year.	"Free Yarn" for sale.	Group I other textiles.	Group II Miscellaneous and non-textile.	Net Balance.
1900-03	211	1·5	11·3	208·2
1903-06	247	2·3	11·9	233·2
1906-09	282	2·1	11·7	268·2
1909-12	238	1·8	10·9	225·7
1912-15	267	1·3	11·3	254·1
1915-18	204	1·1	12·6	190·3
1918-21	200	1·0	13·8	194·3
1921-24	253	1·4	15·1	236·6
1924-27	281	2·5	19·2	260·0
1927-30	314	4·6	20·9	288·9
1930-33	372	7·4	21·8	342·4
1933-36	372	17·3	23·7	330·7
1936-39	412	29·5	27·0	355·1

Having obtained the amount of yarn taken by the handlooms, we have to convert the same into yards of cloth, because yardage is a better index of value *and* because yardage will give a clearer idea of the magnitude of consumption than weight of yarn. Mr. R. D. Bell converted pounds of yarn

into yards of cloth on the ratio 1 lb. yarn=4 yards cloth. The Tariff Board expressed a doubt regarding this on the ground that 80 per cent of the handloom cloth was woven from coarser counts of yarn, and stated that the average yardage per lb. of yarn was nearer 3 than 4 in the case of handlooms. We have examined this question with great care in the light of the data placed before us by the Provincial and State Governments, and in view of the substantial shifts during the last decade from lower to higher counts of yarn, have come to the conclusion that in the case of handloom cloth woven from mill yarn, the suitable ratio in recent years would be 1 lb. of yarn=4·57 yards of cloth. (See Appendix XV for details.) Likewise, the ratio for mill cloth of 4·78 yards of cloth per lb. of yarn which was obtained empirically by reference to the total yarn consumed by mills and the total cloth in lbs. produced by them and by using the ratio of 112 lbs. of cloth to 100 lbs. of yarn, has become very much out of date. As explained in Appendix XV, in view of the change-over to finer counts in most centres of the industry, this is to be revised. We have done this by using official figures for the last 6 or 7 years, and the new ratio, as explained in Appendix XV, is 1 lb. of yarn= 5·26 yards of cloth, in the case of the mills.

However, for the sake of continuity, we have maintained the old ratios of conversion, both for mills and for handlooms in Table XIX. Side by side, we have given in Table XX the cloth production respectively of mills and handlooms calculated on the basis of the new ratios.

TABLE XIX*.—*Cotton yarn consumed and cloth produced in Indian mills and handlooms.*

(1) Year.	(2) Cotton yarn consumed in mills (in million lbs.).	(3) Cotton cloth produced in mills (in million yards).	(4) Yarn available to handlooms (in million lbs.).	(5) Cloth produced on handlooms (in million yards).
1900-01	88	420·6	161·6	646·4
1901-02	106	506·7	206·8	827·2
1902-03	109	521·0	226·2	904·8
1903-04	121	578·4	206·7	826·8
1904-05	139	664·4	234·3	937·2
1905-06	145	693·1	258·3	1,033·2
1906-07	147	702·7	275·4	1,101·6
1907-08	168	803·0	262·6	1,050·4
1908-09	171	817·4	266·5	1,066·1
1909-10	204	975·1	211·4	845·6

*N.B.—In this table, we have not accepted the Director-General of Commercial Intelligence's figures for total yardage of mill cloth, for the reason that the cloth thus recorded has a varying width. Our method reduces the cloth to a standard width both in the case of mills and in that of handlooms, and provides a better basis for comparison.

TABLE XIX*.—*Cotton yarn consumed and cloth produced in Indian mills and handlooms*—contd.

(1) Year.	(2) Cotton yarn consumed in mills (in million lbs.).	(3) Cotton cloth produced in mills (in million yards).	(4) Yarn available to handlooms (in million lbs.).	(5) Cloth produced on handlooms (in million yards).
1910-11	218	1,042·0	217·0	868·0
1911-12	238	1,137·6	248·7	994·8
1912-13	254	1,214·1	235·7	942·8
1913-14	245	1,171·1	254·7	1,018·8
1914-15	246	1,175·9	272·0	1,088·0
1915-16	313	1,496·1	236·2	944·8
1916-17	336	1,606·1	149·4	597·6
1917-18	338	1,615·6	185·3	741·2
1918-19	310	1,481·8	223·5	894·0
1919-20	341	1,630·0	126·5	506·0
1920-21	327	1,563·1	232·8	931·2
1921-22	359	1,716·0	234·5	938·0
1922-23	360	1,720·8	271·0	1,084·0
1923-24 . . .	355	1,696·9	204·2	816·8
1924-25	405	1,935·9	252·7	1,010·8
1925-26	411	1,964·6	222·1	888·4
1926-27	474	2,265·7	304·2	1,216·8
1927-28	496	2,370·9	302·7	1,210·8
1928-29	389	1,859·4	243·3	973·2
1929-30	493	2,356·5	320·6	1,282·4
1930-31	519	2,480·8	314·3	1,257·2
1931-32	601	2,872·8	333·1	1,332·4
1932-33	624	2,982·7	379·8	1,519·2
1933-34	579	2,767·6	315·5	1,262·0
1934-35	656	3,135·7	313·9	1,255·6
1935-36	678	3,240·8	362·6	1,450·4
1936-37	695	3,322·1	316·3	1,265·2
1937-38	766	3,661·5	323·3	1,293·2
1938-39	817	3,905·3	425·8	1,703·2

The conversion of yarn into cloth has been made on the basis of the old ratios, *i.e.*, 1 lb. yarn =4 yards cloth (in the case of handlooms) and 1 lb. yarn=4·78 yards cloth (in that of mills).

TABLE XX*.—*Cotton yarn consumed and cloth produced in Indian mills and handlooms (on the basis of new ratios).*

Year.	Cotton yarn consumed in the mills (in million lbs.).	Cotton cloth produced in mills (in million yards).	Yarn available to handlooms (in million lbs.).	Cloth produced on handlooms (in million yards).
1931-32	601	3,161·2	333·1	1,522·3
1932-33	624	3,282·2	379·8	1,735·7
1933-34	579	3,045·5	315·5	1,441·8
1934-35	656	3,450·6	313·9	1,434·5
1935-36	678	3,566·3	362·6	1,657·1
1936-37	695	3,655·7	316·3	1,445·5
1937-38	766	4,029·2	323·3	1,477·0
1938-39	817	4,297·4	425·8	1,945·2

*N.B.—*See* footnote to Table XIX. In this Table the conversion of yarn into cloth has been made on the basis of the new ratios, *i.e.*, 1 lb. yarn=5·26 yards cloth (in the case of mills), and 1 lb. yarn=4·57 yards cloth (in that of handlooms).

(ii) ESTIMATE OF TOTAL PRODUCTION BASED ON WORKING LOOMS.

45. *Estimate of handloom production based upon number of working looms.*— As stated already, the estimates of handloom production made by us on the basis of the residual yarn are more reliable than any other. But other data have been available to us as a result of detailed enquiries conducted by the Provincial and State Governments which have replied to our questionnaire. There are two such sets of materials: in the first place, we have been supplied data regarding the total number of looms of different categories and the hours for which they are worked on the average; and, secondly, several Provinces and States have sent us the results of direct enquiries made by them in regard to the total production of handloom cloth within their jurisdictions. In the following paragraphs we summarize the results of these two bases of calculation.

Altogether ten Provinces and eight major States have supplied information relating to the number of looms existing in their areas and the extent of their effective working. The looms have been classified according to the type (whether throw-shuttle, fly-shuttle, or other), also stating how many of the looms in each category are working or idle. Further, information is given as to how many hours per day, days per month, and months per year, during both busy and slack seasons, the looms are generally engaged in production. In addition to these data, we have also received information from some important Provinces and States, like Madras, Bengal, Bihar, Baroda, etc., regarding the output per loom per day for different types of handlooms, in respect of standard cloths, which form the bulk of their respective productions. On the basis of such information, we have made an attempt to arrive at an average rate of output per loom per day in the case of throw-shuttle, fly-shuttle and other looms. The average rates of output per loom per day of nine hours, which have been arrived at and adopted in the estimate

are 4 yards for throw-shuttle, 7 yards for fly-shuttle, and 10 yards (as a hat rate) for the other improved types of looms, like Hattersley, semi-automatic, etc. (See Appendix XXIII). In Table XXI we have reproduced figures for the number of working looms of each category engaged in the production of cotton cloth and the average number of hours for which they work per annum, in each of the Provinces and States, which have supplied the relevant information. It must be noted that idle looms are excluded from this table, and in the case of Jammu and Kashmir, and the Deccan and Kolhapur States, in the absence of accurate information relating to the hours and period of work, the working periods of neighbouring Provinces, *viz.*, the Punjab and Bombay respectively, have been made applicable. It will be seen that in the case of Assam the number of working hours and period is not known but we could not make a similar assumption in its case, firstly, because in Assam hand-weaving is a domestic subsidiary occupation and there is no regularity in regard to the work done, and, secondly, because the Assam handlooms are small and primitive and their average rate of production is not known. For Assam, therefore, we take for the sake of completeness the figure of total handloom production supplied directly by the Government of Assam. On the basis of Table XXI and the average outputs of different types of looms, we have calculated the total production of handloom cloth in the various Provinces and States as under :—

TABLE XXI.—*The number of hours worked by looms in a year.*

Province or State.	Number of months worked in the year.		Number of days worked per month.		Number of hours worked per day.		Total number of hours worked in the year.
	Busy season	Slack season.	Busy season.	Slack season.	Busy season.	Slack season.	
Provinces.							
Bengal . . .	7	5	26	25	9	7	2,513
Bihar . . .	4	8	20	10	8	5	1,040
Bombay . . .	7	5	25	25	8	6	2,250
C. P. & Berar .	9	3	25	20	8	4	2,040
Madras . . .	6	6	25	22	10	6	2,292
Orissa	9	3	25	25	7	6	2,025
Punjab . . .	7	5	25	12	10	4	1,990
Sind	8	4	25	15	10	6	2,360
U. P.	8	4	24	15	9	6	2,088
States.							
Baroda . . .	5	7	25	25	10	7	2,475
Cochin . . .	8	4	25	20	8	3	1,840
Gwalior . . .	6	6	24	17	9	6	1,908
Hyderabad . . .	6	6	25	20	16	11	3,720
Jammu and Kashmir .	7	5	25	12	10	4	1,990
Kolhapur and Deccan States.	7	5	25	25	8	6	2,250
Mysore . .	5	7	25	20	10	8	2,370
Travancore . .	12	..	30	..	8	..	2,880

In Table XXII below, estimates of handloom production in respect of ten Provinces and eight major States only have been available. For other areas including "other States" and the North-West Frontier Province, we have to make an addition of about 175,000 handlooms assumed to be all throw-shuttle. Further, we assume 200 working days (of 9 hours each)—which is a rough sort of average for India as a whole—as applicable to these areas. The total production for these areas, estimated at 140 million yards, is added on to the main estimate of 1,477·4 million yards, thus giving a grand total of 1,617·4 million yards. This may be taken as the normal pre-war average for the total production of handloom cloth in India. It will be seen that this average is near about the average for the quinquennium 1934-39, immediately preceding the war, *viz.*, 1,592 million yards, in Table XX, showing the comparative position of the mill and the handloom industry in regard to cloth production.

TABLE XXII.—*Estimates of production of handloom cloth (cotton) on the basis of number of handlooms and average output per handloom.*

Province or State.	Throw-shuttle.	Fly-shuttle.	Others.	Total production of handloom cloth (in million yards).
Assam (*e*)	200,000	8,000	22	31·6
Bengal (*a*)	28,766	60,850	1,088	154·1
Bihar (*c*)	57,828	34,528	34	54·7
Bombay (*b*)	34,650	45,153	915	116·0
C. P. (*c*)	30,926	31,990	350	79·6
Madras (*d*)	44,830	223,880	596	446·3
Orissa (*b*)	27,300	6,300	..	34·5
Punjab (*b*)	192,482	3,427	30	175·6
Sind (*c*)	925	2,275	..	5·1
U. P. (*b*)	91,269	37,268	..	145·2
Baroda (*c*)	3,240	616	137	5·1
Cochin (*c*)	500	1,950	158	3·5
Gwalior (*c*)	3,698	175	172	3·8
Hyderabad (*c*)	30,000	24,050	40	120·7
Jammu and Kashmir (*c*)	5,399	205	..	5·1
Mysore (*c*)	1,250	23,750	..	45·1
Travancore (*c*)	2,000	17,009	..	40·7
Deccan and Kolhapur States. (*d*).	377	5,921	..	10·7
TOTAL	755,440	527,347	3,542	1,477·4

N.B.—(*a*) Deduced for cotton only (80 per cent of the total looms engaged in cotton weaving).

(*b*) Idle looms deducted according to the same proportion as in the case of all looms weaving all textiles, but separately for throw-shuttle and fly-shuttle.

(*c*) Working looms, according to type and engaged in cotton weaving available.

(*d*) On the basis of the total number of cotton looms, apportioned according to the proportion of throw-shuttle and fly-shuttle looms to the total of all working looms.

(*e*) Figure supplied by the Director of Industries, Assam (*cf.* Table XXIII).

(iii) Estimates of total Production supplied by the Provincial and State Governments.

46. *Direct estimates of handloom cloth production supplied by Provinces and States.*—Apart from the above estimates made by us, the Provincial and State Governments have also supplied independent estimates made by them of total production of handloom cloth classified according to the textile used. We reproduce the relevant figures in Table XXIII below.

Table XXIII.—*Total production of hand-woven cloth per annum.*

(In million yards.)

Province or State.	Cotton including hand-spun.	Silk.	Artificial silk.	Wool.	Mixtures.
Assam . . .	31·600	1·400	..	..	..
Bengal . . .	148·206	1·000	..	..	..
Bihar . . .	76·000	0·586	3·532	1·800	..
Bombay . . .	174·236	..	..	2·660	12·744
C. P. and Berar .	103·173	2·251	0·144	0·772	1·145
Madras . . .	407·027	8·284	7·208	0·131	28·764
Orissa . . .	56·178	0·151	..	..	..
Punjab . . .	228·000	6·810	16·750	6·540	..
U. P. . . .	255·126	16·019	42·776	3·787	..
Baroda . . .	9·265	0·008	..	0·002	0·984
Cochin . . .	4·000	..	..	..	..
Hyderabad . .	76·611	0·777	1·955	0·317	..
Jammu and Kashmir	11·464	0·377	0·247	3·704	..
Kolhapur and Deccan States.	13·190	..	2·160	..	3·728
Mysore . . .	26·280	2·700	..	0·900	..
Total .	1,620·356	40·363	74·772	20·613	47·365

In the second column for cotton cloth in the above Table, the figure of 1,620·356 million yards does not include Sind, North-West Frontier Province, Gwalior, Travancore, and some other areas. We, therefore, add 5·1 million yards for Sind, 40·7 million yards for Travancore and 140·0 million yards for the rest of India, thus bringing the total for all India to 1,806·2 million yards. Secondly, the above figures include cloth woven from hand-spun yarn also. For a strict comparison with the estimates in our main Tables XIX and XX, based upon consumption of mill-spun yarn, we must exclude

from the above figure a quantity of cloth corresponding to the hand-spun yarn used in production of handloom cloth. We have elsewhere estimated the total quantity of hand-spun yarn used in hand-weaving at 54·4 million lbs. On the authority of the All-India Spinners' Association, we have also assumed a ratio of 3 yards of cloth to 1 lb. of hand-spun yarn. Thus, the total production of hand-spun and hand-woven cloth amounts to 163·2 million yards. Deducting this from the foregoing estimated total of 1,806·2 million yards, we arrive at a net figure of 1,643 million yards as the estimated total production of handloom cloth produced from mill-spun yarn. The figures of the preceding two tables may be taken as referring to the years immediately preceding the war period, and, hence, may be compared with the figure (in Table XX) for the pre-war quinquennium 1934-39, *viz.*, 1,592 million yards.

47. *Estimate of the total value of hand-woven cloth annually produced in British India and States.*—In Table XXIV below, we reproduce figures for the estimated value of the annual cloth produced by the handloom industry in certain leading Provinces and States. Such an estimate of the value of handloom production is of importance to the statistics of national income, as also to our own conclusions. Figures for Sind, North-Western Frontier Province, Gwalior, Travancore and some of the smaller States are not available. We make an addition of 10 per cent in each case to the figures for cotton, silk, artificial silk, wool, mixtures and the total value in Table XXIV. Accordingly it may be said that the total value of handloom production in India, including British India and States, works out at Rs. 72·80 crores, while the value of cotton cloth amounts to Rs. 47·10 crores, that of silk Rs. 14·76 crores, that of artificial silk Rs. 4·16 crores, that of wool Rs. 3·49 crores, and that of mixture Rs. 3·28 crores. This may be said to have been the position immediately before the war.

TABLE XXIV.—*Estimated value of hand-woven cloth per annum.*

(In lakhs of rupees.)

Province or State.	Cotton.	Silk.	Artificial Silk.	Wool.	Mixtures.	Total.
Assam	79·00	21·00*	..	.	..	100·00
Bengal	511·00	60·00	..	0	..	571·50
Bihar	163·54	5·86	20·18	14·28	..	203·86
Bombay	356·53	..	229·30	30·00	143·37	759·20
C. P. and Berar	259·55	14·92	·02	5·15	13·10	292·74
Madras	1,411·07	139·57	54·79	1·09	136·24	1,742·76
Orissa	161·00	4·54	..	..	..	165·54
Punjab	598·11	82·35	62·30	96·20	..	838·96
U. P.	367·80*	926·96	..	94·64	..	1,389·40
Baroda	18·62	0·11	..	0·03	5·51	24·27
Cochin	12·00	..	..	..	..	12·00
Hyderabad	254·00	15·54	9·78	12·68	..	292·00
Jammu and Kashmir	12·09	3·89	1·70	36·72	..	54·40
Kolhapur and Deccan States.†	12·72	0·11	..	17·06	..	29·89
Mysore	65·25	67·50	..	9·00	..	141·75
TOTAL	4,282·28	1,342·35	378·07	317·35	298·22	6,618·27

*Includes artificial silk. †All States are not included.

48. *Conclusion.*—We have presented above all the available data regarding the probable production of the handloom industry in the years immediately preceding the war. It is a matter of satisfaction that all the three sets of estimates appear to converge towards each other and point to the fact that the quantity of hand-woven cotton cloth produced from mill-spun yarn was somewhere between 1,550 million and 1,600 million yards or between 1,750 million and 1,800 million yards, if we include hand-spun and hand-woven cloth. While, however, this statistical verification is complete, we would like to state emphatically that these estimates can have no bearing on the present situation created by the war. We can only say that if the repercussions of war had not been felt with such severity, perhaps the order of magnitude of production might have remained at the level indicated by the above figures. But as things are, we have every reason to think that the total production in the year 1941-42 has been probably very much below the level of the previous years. At the same time, production in the mills has made large strides. Thus, so far the effect of the war on the handloom production has been adverse. Further, it will be clear from the tables given above that a substantial increase has taken place in the production of handloom cloth. But caution is required in drawing conclusions from this. The increase in the production of handloom cloth in recent years has often been cited as a proof of the prosperity of the hand-weaving industry. As will be shown in Chapter X, production is not a suitable criterion for measuring the welfare of the hand-weaving industry. The only true criterion is the earnings of the hand-weavers jointly and severally.

CHAPTER IV.

Structure of the Hand-weaving Industry.

49. *Nature of the industry.*—The structure of the handloom industry shows various complexities resulting largely from the series of changes which it has undergone during the many centuries of its existence. The course of this industry has not been smooth, especially after it came into competition with mill cloth in the thirties of the last century. It began essentially as a cottage industry and although it still remains such largely, there are notable accretions in it which are more allied to the factory system, and for this the intervention of financiers is greatly responsible. There are also other features in it which are due to the peculiar social organisation of the classes of hereditary workers who have been pursuing this industry from time immemorial. Before dealing with the structure of the industry, it may therefore be useful to touch briefly on the nature of the workers engaged in it.

50. *Hand-weaving a full-time occupation.*—Hand-weaving has frequently been considered as one of the subsidiary occupations open to agriculturists and pursued by them in their leisure time. Such a view has been expressed even in certain Census Reports and other authoritative publications. For example, the Tariff Board (1932) thought that "for a large number of those who are engaged in it, it is a secondary occupation ancillary to agriculture" (p. 156). Our enquiries have clearly shown that this is not the case. The great majority of weavers in India, with the exception of Assam, are full-time workers. The proportion of full-time weavers is 99 per cent in Sind, 88 per cent in Bombay, 87 per cent in Madras, 81 per cent in the Punjab, 75 per cent in the United Provinces and 75 per cent in Bengal. Nearly all the weavers of Travancore and Cochin, 97 per cent of the weavers in Mysore and 85 per cent of those in Hyderabad are full-time workers. The proportion of part-time weavers is negligible in Sind and the States of the Kolhapur Agency.

The only notable exception is Assam. In the Assam Valley, hand-weaving is pursued as a full-time occupation in only a few places. Every woman is expected to spin and weave, and every homestead out of five possesses a loom or two. While men work the loom only during two months (from the middle of November to the middle of January) when agricultural operations are slack, women pursue weaving almost daily during their leisure hours. The origin of the universal prevalence of hand-spinning and weaving in Assam is interesting. It is believed that in the 17th century, an Ahom king of Assam ordained that before sunset each day every woman must spin a certain amount of yarn and every man a basket or mat, and that the products should be shown to the village officer the next morning. The defaulters were given four stripes by the village *borah*. Although such compulsion disappeared long ago, spinning and weaving are still learned and regarded as a necessary accomplishment for girls, as without this their chances for marriage are scanty. According to inviolable custom, every bride has to take with her to her husband's house her loom and the special garments made by her to be presented

to the bridegroom's parents and relatives, and her worth is judged by the quality of the fabrics made by her. This has made at least the women of Assam industrious.

While hand-weaving is thus a common occupation to all in the Assam Valley, it is the function of special castes, at any rate among Hindus, in the rest of India, as will be shown presently. Until a few decades ago, no one but the members of those castes did weaving. In former days, even a social stigma attached to any one of the other (especially 'higher') castes taking up weaving. The weaving castes had a fairly high social position and scorned to take the plough or wield the hatchet. If today a certain proportion of the weavers especially in some of the northern Provinces pursue agriculture along with weaving, it is because those people do not belong to any of the hereditary castes to whom weaving is ordained as their caste *dharma*. In Bihar, and to some extent in Bengal and the United Provinces, a large number of Muslims called Jolahas or Momins who were previously agriculturists have taken to weaving as a part-time occupation. Even in their case, what is subsidiary is not weaving but agriculture. They are now weavers by profession and earn their bread chiefly by it; agriculture is a second string to the bow. Others pursue sheep-rearing, fishing and *ekka*-driving as their subsidiary occupation.

51. *Weavers' castes.*—In the ancient economy of India, every occupation was connected with a caste and each caste stuck firmly to its caste *dharma* jealously keeping out others from entering it. This rigidity of the economic and social structure has indeed broken down lately, and while many outsiders have taken up weaving, large numbers of the hereditary weaving castes also have given up weaving. Nevertheless, even to-day the great majority of the hand-weavers in India are of the traditional weaving castes, and in many places they maintain their social traditions intact. The social status of the weavers has never been low, and they are included among the Vaisyas, the third of the four main caste divisions in India, and many of them still wear the sacred thread which is the mark of the twice-born. The weaving castes or communities are called by different names in different parts of the country. The more wide-spread of these castes are the Salis, Devangas, Koshtis, Khatris and Tantis among Hindus, and Jolahas or Momins among the Muslims. Some of the Hindu weaving communities count large numbers among them; the Padmasalis alone are said to number over a million, scattered over the Provinces of Madras, Bombay, and Central Provinces and Berar and the States of Hyderabad and Mysore. Some, like the Sourashtras of Madura, are holding high social and economic status. At the other end there are also classes who are in a very depressed economic condition owing to continued unemployment for many years. (See Appendix XXV for further details.)

52. *New entrants.*—When the hand-weaving industry in India came under severe competition from the machine-made imports, the position and prospects of the industry were generally affected, and as a result large numbers of weavers belonging to the weaving castes gave up their hereditary calling and took up other professions generally connected with trade or agriculture. On the other hand, weavers who prospered by dealing in cloth gradually became business men and remained only nominal members of the weaving castes. They along with a few others got into the liberal professions by utilizing educational facilities and have now taken their place among the

urban middle classes. Those who changed over to menial jobs still took pride in calling themselves by the old caste names but those who prospered in business or the liberal professions soon gave up their caste contacts. Due to one cause or another, a large number of weavers left off their hereditary calling. This change has been taken note of in the periodical censuses, all-India as well as Provincial and State, and it is believed that considerable numbers of the chief weaving castes had given up weaving by 1921. Unfortunately no accurate statistics are available regarding these changes. While the weaving castes were thus being depleted, other castes have been taking up weaving. The influx of new entrants has been largest in Madras and Bengal, where handloom weaving is still holding out, and least in Orissa, Central Provinces and Berar, Sind and Mysore, where the industry has been in a stationary, if not declining, condition. The entry of outsiders has affected the hand-weaving industry in many ways. In some areas, this influx has resulted in increased competition among the weavers and a fall in earnings. It may also be that the unregulated increase of production has weakened the hand-weaving industry in its competition with the mills. But in certain areas, the new entrants have brought with them considerable initiative and enterprise. An interesting feature of the weaving industry in India is that for a long time in the past there has been a large degree of specialisation among the weaving castes. In the early days, a considerable proportion of weavers must have made cloth to order for their immediate neighbours, mostly with the yarn supplied by them; but after the expansion of markets within India and outside, there arose a steady demand for high-quality fabrics of various kinds, and this called for specialisation and brought about a caste-wise as well as territorial division of labour. Such specialisation has been going on in Southern India, among the different weaving communities there.

53. *Handloom industry—urban or rural?*—Another popular view is that handloom weaving is essentially a village industry and that it is carried on mostly by independent weavers. This is still largely the case in backward tracts of the country but is no longer true of the more important hand-weaving tracts. In times of old, when hand-weaving catered mostly for the needs of the village, weavers generally lived in villages and pursued their business without the intervention of middlemen. The yarn for the cloth was either spun in the home of the weaver or in the neighbourhood, and often yarn was bartered for cloth. In such an economy largely controlled by barter, the financier was not essential for the purchase of the raw material and for the disposal of finished goods. But all this changed when the development of communications led to the extension of the market. Within India, trade between distant parts grew after the improvements in long-distance transport. From early days, speciality fabrics from India always found a growing market in certain distant lands. In this state of things the ordinary weaver found himself helpless in his village without credit from a financier or advances from a merchant in the town, and this induced him to migrate to towns. Side by side with this, some of the weavers' villages developed into towns with the influx of the yarn dealers and financiers. When the East India Company started its "factories" in India, it found the handloom weaving in many parts centred in towns and controlled by financiers. The Company itself had to adopt the middleman's methods for obtaining its supplies of cloth for the European markets. They employed *dalals* or brokers and

through them gave advances to the weavers as was the practice in the country, and encouraged by these advances a large number of weavers from the interior came and settled down around the Company's principal establishments in India at Madras, Hooghly and Surat.

54. *Weavers' population in urban centres.*—As a result of such tendencies operating during the last eighty years, hand-weavers are now found largely in towns, especially in those areas of the country where production is for distant markets. To-day the leading communities of weavers—Sourashtras, Devangas, and Salis in particular—are living mostly in urban areas. In fact, they form the bulk of the inhabitants of the many leading cities to-day in India south of the Vindhyas. Weavers form considerable proportions of the population of important towns like Multan, Ludhiana, Benares, Barabanki, Mirzapur, Mau, Bihar Shareef, Gaya, Bhagalpur, Santipur, Dacca, Vishnupur, Comilla, Bankura, Cuttack, Berhampore, Chicacole, Peddapuram, Uppada, Pedana, Yemmiganur, Adoni, Guntur, Mangalagiri, Chirala, Arni, Saidapet, Conjeevaram, Gudiyattam, Aruppukottai, Mayavaram, Dindigul, Coimbatore, Tinnevelly, Ambasamudram, Nagercoil, Calicut, Cannanore, Mangalore, Belgaum, Dharwar, Hubli, Ilkal, Guledgud, Sholapur, Surat, Poona, Ahmednagar, Aurangabad, Malegaon, Yeola, Indore, Chanderi, Burhanpur, Nagpur and Umrer. The proportion of the weavers in certain towns can be seen from the following table :—

TABLE XXV.—*Weavers' population in certain towns.*

Province.	Town.	Total* population.	Weavers'* population.	Approximate percentage of weavers to total population.
Bengal	Santipur	24,992	10,000	40
Bombay	Sholapur	144,654	60,000	41
,,	Surat	98,936	28,700	29
,,	Guledgud	20,000	15,000	75
,,	Ilkal	19,000	..	nearly all.
,,	Banhatti	9,300	4,500	47
C. P.	Nagpur	215,165	20,825	10
,,	Burhanpur . . .	44,066	20,000	45
U. P.	Benares	201,037	50,000	25
,,	Mau (Azamgarh Dt.) . .	21,264	18,000	84
Madras	Madura	182,918	55,000	30
,,	Salem	102,179	39,161	38
,,	Coimbatore . . .	96,196	23,345	25
,,	Molapalayam . . .	32,000	25,000	78
,,	Rasipuram . . .	16,000	8,000	50
,,	Mangalagiri . . .	13,000	7,000	54
,,	Pedana	10,000	6,000	60
,,	Yemmiganur . . .	12,000	4,800	40

*Figures for total population are mostly from the Census Report, 1931, while the figures for weavers' population are collected independently.

55. *Urbanisation of the industry.*—In many of the towns, the weavers occupy a prominent place in the civic life and some of their leaders play an active part in the municipal administration. Most of the hereditary weaving classes have had nothing to do with agriculture; nay, they have considered agricultural work as *infra dig.* To take the weaving folk as a part of the village population is therefore incorrect. The explanation of the urban character of the weaving class is simple. The best-skilled weavers were engaged in supplying cloth to kings and upper classes. Therefore, from the beginning a large number had to stay in the vicinity of courts to ply their trade effectively. Subsequently, others also followed suit, attracted by the advantages of nearness to market and to the source of the raw material. The financiers were in the towns and after the expansion of trade with distant markets, most weavers needed financiers to make advances to them. Thus more and more of the weavers have been migrating to the neighbouring towns. This is most noticeable at Amritsar whose growing *karkhanas* are attracting weavers from the neighbouring areas, who come by day to work in the town with all its attractions. In Salem, the same thing has been happening for many years and this accounts for the increase in the number of looms there. It is said that cinemas and tea-shops are two of the chief causes of this influx to towns. On the other hand, when the villages were large and centrally located, the financiers migrated to them in search of cloth for their trade, and by such influx villages gradually grew into towns. Thus Burhanpur in the Central Provinces, which was originally a large weavers' village, attracted Gujerathi and Marwari financiers and thus it grew into an industrial town.

In these many ways, handloom weaving has now become largely an urban industry. In Bombay 45 per cent of the total number of looms are found in 26 urban centres. In Madras 39 per cent of the looms are found in 49 urban centres. The position is nearly the same in Central Provinces and Berar, Hyderabad and other areas. It is, however, true that a large number of weavers are still working in villages, but it has to be noted that although they are residing in villages or hamlets they have little connection with agriculture. In certain parts of Bengal and Bihar where agriculturists (especially Muslims) have lately taken up weaving, weavers are indeed part of the rural community. In Madras, too, large numbers of weavers still live in villages, but those villages are really unlike agricultural villages, which tend to be more or less self-sufficient.

56. *Localisation of the industry.*—When a large weaving population congregates in a town, there arises the need for a good many subsidiary trades which depend on the handloom weaving. Such trades are dyeing, bleaching and finishing (indigenous type), calico printing (indigenous type), gold and silver thread making and embroidery. There are also various minor trades connected with the upkeep of the loom, such as the making of reeds, healds, country shuttles, and looms and parts thereof. All these give employment to a large number of people. In Dacca and Santipur embroidery was the source of employment for many persons. In Burhanpur (Central Provinces) where expensive saris with laced borders were made, between 5,000 and 7,000 persons were engaged in lace-making alone. In this manner a localisation of industry had been taking place even before the machine age

started. In Dacca, Murshidabad, Ahmedabad, Surat, Yeola, Burhanpur, Conjeevaram, Madura, Salem and other centres, where high-class cloths were formerly made, a thriving population was engaged in subsidiary trades of many kinds. With the decline in the demand for kinkhabs, muslins, brocades, lace-bordered saris, dhotis and expensive turban cloths these trades also decayed and the influences which previously made for localisation had a setback.

Side by side with such a localisation of industry a great deal of geographical specialization has also taken place. This has been a feature of Indian handloom industry from ancient times and still continues today. Even in the days of the Roman trade, distinct specialization was noticeable among various centres, and this has continued till quite modern times. Dacca has always been specialising in artistic cotton cloths like muslins and *Jamdanis* using yarn up to 500s counts, and such cloths formerly cost any thing up to Rs. 500 a piece. Santipur and other centres have also been long noted for special types of fabrics. In Madras, Masulipatam specialised in printing—an admirable art which other countries learned from India—and its printed chintzes, *kalamkaris* and *palempores*, had been famous all over Europe and Westrern Asia from early times. Many centres in Western India, such as Ahmedabad, Surat and Yeola, specialised in the making of gorgeous fabrics of many kinds which were also equally famous. In Gujerat, printing and decorating work on cloth was extensively carried on as a speciality. The *kinkhabs* of Ahmedabad commanded markets from Cairo to Pekin for many centuries. Nor was all the specialization confined to high-class fabrics only. Even in regard to ordinary cloths, certain places concentrated on special lines. For instance, in Madras, the superior tent cloth of Rajahmundry and Kandukur, the cotton carpets of Adoni, the handkerchiefs of Valaparla and the stained cloths of Madura have had each a special place. In Vizagapatam was made a strong cloth called *punjam*, which was dyed blue in Madras and exported to the Mediterranean and the West Indies. There was also a distinct tendency for specialization within smaller areas even within districts. For instance, in the district of Salem, Salem town and Rasipuram even today concentrate on high-class fabrics like silk and lace-bordered saris, dhotis, angavastrams, etc., and Dharmapuri and other smaller centres make saris and dhotis for the common people. While the above centres specialized in cotton fabrics, others concentrated on silk. Such were Murshidabad and Vishnupur in Bengal; Conjeevaram and Madura in Madras; Paithan, Poona, Yeola and Surat in Western India; Benares and Mau in the United Provinces; and various places in the States of Kashmir and Mysore. In those centres also congregated the subsidiary trades required for silk fabrics. Such a remarkable geographical division of labour and concentration of industry did not perhaps obtain in any other industry in any part of the world before the Industrial Revolution. In recent times the lines of specialization have indeed changed owing to shifts in demand; yet the tendencies noted above are still continuing to a great extent, as will be clear from the details of fabrics given in Chapter VI.

57. *Weavers' craft guilds.*—Hand-weavers have always been gregarious people. They have had among them certain corporate organisations working for the common good and these have been in some ways analogous to the craft guilds of the Middle Ages in Europe. Most of these guilds were based

on caste, but it would appear that in the halcyon days of the Dacca muslin industry, there were craft guilds on an inter-caste basis. Taylor states in his *Cotton Manufactures of Dacca* that the weavers' guild at Dacca maintained strict rules regarding apprenticeship, laid down certain standards, regulated hours of work (from 6 to 7 a.m. till noon and from 2 or 3 p.m. to 6 or 7 p.m.), and kept certain holidays (40 in the year). To what extent all this was enforced is not clear. At any rate, most of these have since fallen into desuetude. Vestiges of such regulations are, however, still extant here and there. An important function of the older guilds was to maintain temples and celebrate festivals, and in this also there is a clear analogy between European and Indian guilds. Each caste has still its own patron god or goddess, and at every centre where a large number of them reside they maintain their own temples whose size and splendour still bear witness to the prosperity of the industry in olden days. The weavers have also got their local *punchayats* which settle disputes and ordain the communal life and social relations. In recent times, the more wide-spread weaving castes like the Padamasalis and Devangas have organised associations and convene now and then all-India conferences for the discussion of common problems. These conferences do evoke some enthusiasm over wide areas, although it does not appear that they have been able to help the weavers much in solving their common economic problems. There are similar associations also among the Muslim weavers, such as the Jamiat-ul-Ansar in the United Provinces and Jamiat-ul-Momineen in Bengal. Another important function of the weavers' corporate organisations was to maintain sizing yards. In many parts of the country, warping and sizing were done in the open streets and for this purpose, streets in weavers' quarters are broader than elsewhere, and the weaving community had seen to it that shady trees were planted in the middle of the road. Such planned streets are a common feature of the weaving centres of the Madras Province, and are particularly noticeable in Melapalayam, Conjeevaram, Nagercoil and other hand-weaving centres in South India. An alternative method is to have a shady open ground adjoining the weavers' quarters, called *pāvadi* or sizing ground. Extensive sizing grounds are still seen in some of the southern weaving centres. The maintenance of such sizing facilities is among the traditional duties of weaving organisations.

Craft guilds of a modern type have already arisen in many parts of the country, and these are intended to help in the marketing of cloth and maintenance of standards. In certain centres like Ahmednagar, Nagpur and Choumuhani the weavers have formed associations mostly on a caste basis for the regulation of production and marketing. An account of some of these will be given in Chapter IX. In large weaving centres like Sholapur and Santipur, the different economic groups in the weaving industry have formed separate associations for self-protection. In Sholapur, the merchants, *karkhanadars* and weaver workers, have separate associations on a trade basis. A labour movement has also developed in recent times among hand-weavers, especially where they have been brought together in factories, and this has given rise to new problems. The solidarity of the handloom weavers has been broken owing to various changes in the structure of the industry, which will be discussed presently.

58. *Intervention of middlemen.*—As a result of the changes mentioned above,—the decline of hand-spinning, growing dependence on mill yarn, and

settlement in urban areas,—the handloom weavers have come more and more into the grip of middlemen. Yarn has to be purchased and as the average weaver has no cash for such purchases he has either to purchase it on credit or get into some relationship for this purpose either with the yarn-merchant or with the financier on a contract or wage basis. There were also other reasons why the weaver was inclined to give up independent business. The growing fluctuations in the price of yarn and cloth made weaving a risky business. Such risks could be undertaken only by weavers who had some financial backing, and most of them had no such backing. Further, the weavers producing for distant markets have to wait for a long time before their investment on yarn could be realised, but impecunious weavers could not wait; they had to sell their labour in advance, and for them dependence on a financier was Hobson's choice. Most of the weavers needed not only the money for the yarn but also an advance for their maintenance during the time of production. This is one of the familiar features of the Indian economy. A large portion of the agriculturists and handicraftsmen are so needy that they always live by mortgaging their future labour. The weaver is no exception; he has normally to depend on advances, and because he needs advances so badly, he has to sell his labour cheap. In fact in most of the middleman systems, the working weaver is so inexorably tied to the financier that he is not able to sell his labour in a free market, nor sell his products at the highest available price. This again is a feature common to all branches of the agricultural and handicraft economy.

59. *Changes in the industrial structure.*—Thus the development of communications and the dependence on imported yarn effected a drastic change in the hand-weaving industry. In areas where production is largely for distant markets and the weavers are financially weak to undertake the risks of price fluctuations, weavers who had been previously independent have become employees of merchants or *sowcar*-weavers, although working in their homes; in some places they have been congregated in workshops called *karkhanas*. Such changes have happened more in Bombay and Madras than in Northern India. The independent cottage system now predominates only in backward areas where coarse cloth is produced chiefly for local use, in villages whose self-sufficiency has not been much affected by recent improvements in transport, in places where there is no lucrative business to attract middlemen and capitalists and where weaving is a secondary means of livelihood to agriculturists. Especially in Assam, Central Provinces and Berar, and Bihar, these changes have not made much headway. In some Provinces, a small proportion of weavers have come into the co-operative organisation, and of this we will speak in a later Chapter. The following table will bring out the proportion of the different classes of hand-weavers in the various Provinces and States.

TABLE XXVI.—*Classification of weavers.*

Province or State.	Independent weavers.	Percentage of total.	Weavers working under mahajans.	Percentage of total.	Weavers in *karkhanas*.	Percentage of total.	Members of Co-operative Societies.	Percentage of total.	Total.
Assam . . .	416,000	99	2,000	½	2,000	½	1,000	..	421,000
Bengal (a) . .	..	..	..	..	..	..	..	..	201,979
Bihar . . .	100,193	98	2,300	2	3	..	197	..	102,693
Bombay . . .	23,800	21	28,000	24	63,300	54	2,000	1	117,100
C. P. and Berar .	56,747	80	12,670	18	1,843	2	130	..	71,390
Madras . . .	119,760	28	256,630	60	34,218	8	17,108	4	427,716
Orissa . . .	10,000	20	39,500	79	250	..	250	..	50,000
Punjab . . .	206,631	58	139,275	39	6,400	2	3,548	1	355,854
Sind . . .	457	10	3,656	80	228	5	228	5	4,569
U. P. (a) . .	..	..	..	..	..	..	..	..	244,712
Baroda . . .	768	14	4,448	80	11	..	211	5	5,438
Cochin . . .	300	13	1,540	61	210	9	400	16	2,450
Gwalior . . .	4,952	85	800	14	72	1	..	..	5,824
Hyderabad . .	28,550	26	35,370	32	43,510	40	1,345	2	109,015
Kolhapur and the Deccan States.	2,032	15	8,706	70	795	7	..	..	12,891
Mysore(a) . .	..	..	..	..	..	..	..	..	35,000
Travancore . .	9,000	47	4,200	21	5,704	32	100	..	19,010

(a) Not available.

60. *Types of middlemen.*—We shall now proceed to analyse the different types of middlemen operating in the hand-weaving industry. There is, first of all, the *sowcar*-weaver (often called "master-weaver") who employs under him weavers mostly of his own caste. Secondly, there are the merchants, either of yarn or of cloth or both, who are keenly interested in the supply of cloth of qualities required and in adequate quantities. They can indeed purchase goods at markets and *hats*, but they consider it more advantageous to employ labourers to produce what they want. Thirdly, there are the *karkhanadars* who bring the weavers together into small factories or workshops. The first two types of employers leave the weavers to work in their own homes with their own looms and other appliances; rather, they prefer this because they could get work done without incurring the cost of looms and working sheds. This is indeed analogous to the "Domestic System" which prevailed in the English textile industry before the Industrial Revolution, and the home system which still continues in many parts of continental Europe. In some centres, however, employers found it better to bring weavers together in small factories with suitable looms and other equipments provided for them. In certain places, like Sholapur, the various systems are mixed up in a complex organisation. It may be seen that the conditions operating in India to-day in the hand-weaving industry are not materially different from those which prevailed in England before the Industrial Revolution ushered in the full-fledged factory system.

61. *The Sowcar-weavers and others.*—In many areas, a class of *sowcars* has arisen from among the professional weavers themselves. As stated above

such persons have been called "master-weavers". The term "master-weaver" was used in Mediæval Europe for the independent craftsman who worked in his own home with a few apprentices learning the trade and possibly with a journeyman or two who not being equipped to start off as master-weaver had to work as day-labourer. Thus the master-weaver was not an employer of labour, and he paid no regular wage to the apprentices who learned weaving under him. Such master-weavers have been in existence in India also, at any rate in the bigger centres, and, in the days when the caste system worked somewhat like a guild, the master-weaver took apprentices from his caste for training and assistance. But in modern times owing to the growing prospects of trade, some of the well-to-do weavers have set up as merchants, and they employ their fellow caste-men under them for a wage or on other forms of contract. Such weavers may be called "*sowcar*-weavers". They are more analogous to the "clothier" in England of the days just before the Industrial Revolution than to the master-weaver of the guild days. Even as the clothier did, the *sowcar*-weaver gives yarn and other raw material to be worked up in the homes of the workers, and takes back cloth after paying the wages or the prices contracted for.

Some of these *sowcar*-weavers have built up very large organisations in centres which are catering for the export market. There are many employers in centres like Erode, Gudiyttam, Trichengode and Melapalayam, who control between 500 and 1,000 looms each. At Erode we visited the establishment of a Sengunda (weaver) merchant who controls as many as 1,000 looms scattered about in the villages around. He manufactures a type of shirting which has a demand not only in India, but in Ceylon, Malaya and in the neighbouring lands and islands. For the convenience of distributing yarn and collecting produce, he maintains 10 local depots with the necessary assistants in charge. His whole establishment is going on like a well-organised factory although all the employees are working in their own homes. Such mahajan weavers who employ large numbers of their caste-men are to be found also in several centres in Bombay especially in Karnatak and Maharashtra. In some parts of the United Provinces (*e.g.*, Mau), the bigger broker-weaver is called a *girhast* (Grihastha, a householder). The leading *girhasts* are also yarn merchants as well as wholesale cloth merchants. Some of them engage dalals for distributing yarn and collecting cloth; others directly deal with the weavers. The *girhast* is regarded by the workers with some affection as they are all of the same caste and are bound by something more than mere cash-nexus. He and the weaver-workers have to co-operate in their caste festivals and other functions. They are bound to each other by various ties. The workmen are in need of advances and the employer is able to give them with confidence as the weavers are easily within his reach. The system, therefore, works well for both parties.

In many weaving centres well-to-do weavers with the capacity or inclination for doing such business are few or are wanting, and the whole business is in the hands of mahajans. Sometimes, it is a yarn merchant that sets up as an employer; but more frequently it is a cloth merchant. Often a mahajan combines yarn selling and cloth stocking and thus he has the need and the facility for employing weavers under him. There are also a certain number of moneylenders who are taking to a similar relationship with the weavers in order that they may enhance the income from their investments.

62. *Systems of advances.*—The central feature of the relationship between the middlemen and weavers is the advance. It exists in various forms and under various names in all parts of India. An elaborate system of *dadan* prevails in Bihar and parts of Bengal which binds the weaver to work for the mahajan. In the *katiauti* system prevalent in the United Provinces, the price of the yarn is debited to the weaver's account in the mahajan's books and when the cloth is delivered its price is credited. Interest is not usually charged, but the mahajan is able to realize not only interest but a good profit by calculating the price of yarn at a slightly higher rate than the market price, and by making certain customary deductions from the purchase price of cloth. A similar system prevails in the Central Provinces also. The *munkade* system obtaining in the Karnataka districts of Bombay presents peculiar features. In Ilkal two variants of the system are in vouge. In one system the head-weaver makes advances of money to the workers on condition that they deliver a stipulated quantity of cloth of prescribed type and pattern within a fixed period, and the price paid for the cloth is also fixed beforehand. In the other system the head-weaver advances both cash and raw material to the weaver; the price of yarn and other raw material advanced as well as the price of cloth are fixed beforehand. The weaver is given raw material for 10 saris but generally it would suffice for making 11 saris and the eleventh sari would be kept by the weaver and is an additional inducement for him to enter into such contracts. The system of advances (*munpana*) obtains in the Tamil areas also and the features above described obtain wherever weavers are under the control of mahajans.

The payment of advances is not merely for the convenience of the weaver; it is also regarded as advantageous to the middleman as it would bind the weaver to work for him continuously. As in the case of certain classes of agricultural workers, a loan received from the employer gives him a hold over the labour of the borrower. This was at first only a moral hold, but it is often made legally binding by the registration of bonds and mortgage on houses. Such contracts are specially valued by mahajans in areas where there is a scarcity of weavers prepared to work on such terms. On the other hand, in places where there are too many weavers eager to work for mahajans, the poor weaver is at the mahajan's mercy, and the latter may insist on the former keeping a deposit with him to ensure the safe delivery of cloth. We heard in Belgaum (Bombay) that in certain cases a deposit of money has to be made to the mahajan before he could be persuaded to give any work to the weaver.

63. *A three-fold contract.*—In the ordinary form of contract between the merchant and the weaver there are only two parties; but there is a further development of this in which a smaller middleman, generally a head-weaver, intervenes between the merchant and the actual worker. This has become necessary because it is not easy for the merchant to keep in touch with a large number of weavers living in different places. He needs some person familiar with the weavers to act as an intermediary. This function is somewhat analogous to that of the "fustian-masters" and "piece-masters" who, in the days just before the Industrial Revolution, acted as commission agents in the English woollen industry. The fustian-master stayed among the weavers, employed them on a contract or wage basis, distributed yarn and other material to them, and collected the cloth when ready. Nearly the same functions

have been performed by the weaver middleman in the Indian hand-weaving industry. They are called by different names in various parts of the country —*asami* in the Bombay-Karnatak, *girhast* in the United Provinces and *sowcar* generally throughout the country.

The best known system of contract is the *mungani* prevailing in the Ceded Districts of the Madras Province. *Mungani* is said to mean contract between three parties, *viz.*, the cloth merchant, the weaver-middleman, and the worker. In the Kurnool District, the *mungani* system calls for two distinct contracts—one between the merchant and the head-weaver and the other between the head-weaver and his employees. The head-weaver undertakes to supply the merchant a certain amount of cloth and the merchant makes advances to him. If the merchant is also a yarn dealer, he gives the required amount of yarn also, but he covers himself against risks by treating the yarn advanced as sold at the ruling market prices and when the goods are tendered he buys them at the prices ruling then. The head-weaver in turn enters into contract with individual weavers, advances them yarn and small amounts of money to meet their day-to-day expenses. When the goods are delivered the wage fixed is given and the account settled. In course of time weavers become indebted to the head-weavers and merchants, and lose their freedom completely. We were told that in Pattikonda the weavers who worked under such contracts had mortgaged their own lands and houses to the *sowcar*-weaver. The system varies slightly in Bellary where head-weaver makes only yarn advances to weavers and no cash. There are also differences in regard to the nature of the contract between the merchant and the head-weaver. Mr. N. G. Ranga, M.L.A., in his book *The Economics of Handloom* (pp. 21-22) explains a reformed *mungani* system prevailing in Jammalmadugu, Proddatur and other centres under which the merchants agree to take cloth from the weaver-middleman at fixed prices, thus lessening the risk borne by the latter. But this has encouraged the middlemen to sell the cloth in the open market in case higher prices can be realized and therefore many merchants have begun to deal directly with the weavers.

A further development of the triple-contract system is found in Sholapur. The head-weaver is called an *asami* and is a necessary link between the merchants or *karkhanadars* on the one hand and the weavers on the other. Many merchants in Sholapur have their own *karkhanas* but when the production in such *karkhanas* is not adequate they enter into contracts with *asamis* on an out-work basis ordinarily for a period of 6 to 8 months. Advances are paid in money and in some cases yarn also is advanced. The *asamis* work in their own homes with a few looms and they also get work done by weavers in the latter's homes. In the system followed in Sholapur the functions of the three parties to the contract are clearly defined. The merchant or *karkhanadar* is the financier, the *asami* is the organiser or supervisor, and the weaver does the labour. The financier charges interest on the advances made and he also makes profits besides; the *asami* is somewhat like a commission-agent and the margin between the actual cost and the price paid for the cloth is his commission. In Sholapur 60 per cent of the weaving is undertaken on this basis. The system is also popular in Ahmednagar, Sangamner and Parola.

There are in other Provinces also systems analogous to the *mungani*, although they present variations in detail. In the United Provinces there

are *arhatias* and *sattiwalas* who act as commission agents for the wholesale cloth merchant, and keep depots for the distribution of yarn and collection of cloth. They advance money to the weavers, and distribute designs to them. In some places (*e.g.*, Mau) they engage *dalals* or brokers for doing part of this work. In Bengal *paikars* obtain cloth from weavers on various terms or buy cloth at the *hats*. They generally act as commission agents of wholesale stockists. Nor are they all dependent on advances from the wholesale stockists; some of them work with their own funds.

In the more elaborate business of specialised hand-weaving centres, there is a chain of middlemen functioning in the trade. In Sholapur *karkhanadars* who have no finance of their own obtain advances from stockists with whom they enter into contract and thus three middlemen intervene between the wholesale dealer and the weavers. In the Madras handkerchiefs trade, there are two intermediaries between the export firm and the weavers, *viz.*, the *dubash* who collects cloth (on which he obtains commission) and the head-weaver who controls many looms. The trade in the well-known Benares saris is also controlled by a chain of middlemen. Thus the exigencies and complexities of the business in handloom cloth have brought about a hierarchy of middlemen in many centres. There is every probability that some of these middlemen make good profits when trade is brisk, but the normal toll levied by them is not so high as is often imagined by people.

64. *Handloom factories or karkhanas.*—The state of things described above indicates that the conditions were becoming ripe for the congregation of workers at a common work-place. In the result handloom factories or *karkhanas* have come into being in several parts of the country. The largest number of *karkhanas* are in the Bombay Province. From the statistics supplied to us, we find as many as 54 per cent of the handloom weavers in that Province are working in *karkhanas*. It is also estimated that *karkhanas* account for 30 to 40 per cent of the total production of cloth in the Bombay Deccan centres. At present, there are in Sholapur 273 *karkhanas* with more than 10 looms and about 826 with more than 5 looms. The largest *karkhanas*, however, are in the Malabar District. There are 27 factories in Cannanore with more than 50 looms and 5 of these have more than 200 looms. Mangalore has 6 *karkhanas* with more than 50 looms. At Amritsar there are 11 such *karkhanas* and at Ludhiana 2. In Sholapur which is the largest *karkhana* centre there is only one factory having more than 50 looms. A certain number of small *karkhanas* are also found in other centres in the Punjab and the United Provinces, but we have not been able to get information about them. In the following table are given the number of *karkhanas* found in nine centres, classified according to their size (so far as information is available).

TABLE XXVII.—*Classification of karkhanas in certain towns according to size*

—	Number of *karkhanas* with 5 to 10 looms.	Number of *karkhanas* with 11 to 20 looms.	Number of *karkhanas* with 21 to 40 looms.	Number of *karkhanas* with 41 to 50 looms.	Number of *karkhanas* with more than 50 looms.	Total.
Sholapur . . .	553	230	36	6	1	826
Malegaon . . .	100	15	..	..	..	115
Ahmednager . . .	40	25	2	..	..	67
Sangamner . . .	16	2	..	..	..	18
Parola . . .	60	..	..	..	..	60
Amritsar . . .	27	56	46	10	11	150
Ludhiana . . .	35	20	10	3	2	70
Cannanore . . .	34	35	22	4	27	122
Mangalore . . .	12	17	7	5	6	47

Karkhanas of some kind or other have been in existence in India at least from the Moghul days, but the modern type of *karkhanas*, factories run by hand power, were first started on the west coast of Southern India by the Christian missionaries, as a means of giving employment to the poor people who joined them. The first of these factories was started in Mangalore in 1844, and then followed those at Cannanore and Calicut. In 1851, they brought out from Europe Mr. Haller, a specialist in weaving, and the first fly-shuttle loom was introduced by him. He also made experiments in dyeing, and the khaki dye which has since become so popular is said to have been invented by him. "When Mr. Haller first brought out his khaki, the then Superintendent of Police in Mangalore was so pleased with it that he got permission to introduce it for the use of the police force under him. Lord Roberts, when he was Commander-in-Chief of India, once paid a visit to the Mangalore weaving establishment, and it was there that he happened to see khaki, which he afterwards recommended for the use of the British soldiers" (quoted from the *Madras Mail*, April 11, 1904, in the booklet *Basel Mission Industries*). They also made check coatings and shirtings and the 'Calicut Check' soon became famous. Subsequently factories were started by other persons, employing the workmen trained by the missionaries, and during the last war and afterwards a large number of factories came into being in Calicut, Cannanore and Mangalore and in the smaller towns around them. As the professional weavers did not come forward to work, a new class of weavers arose in that part of the country. The Salis, the old weaving caste, continued to make their traditional fabrics, the demand for which had been fast declining. Nearly all the handloom factories in Malabar now produce shirtings and coatings.

The special feature of these West Coast *karkhanas* is that in each factory the organisation is complete, from the manufacturing to the marketing of cloth. Each factory has its own arrangements for dyeing, preparatory processes, weaving and marketing, and all this is done by human labour. At first there was no provision for finishing, but subsequently two finishing plants propelled by electric power have been installed, one at Cannanore and the other at Pappinasseri. These are available for use at a reasonable charge. These factories have also got a regular marketing organisation. They send

out travelling canvassers who book orders from various parts of India, from consumers as well as from wholesale cloth dealers. The canvassers are paid a commission ranging from 3 per cent to 10 per cent on the net value of the goods realized. This system was first laid down by the pioneers and is still being followed in all the factories. Their marketing organisation has succeeded quite well, and in fact, some of the handloom factories in Cannanore are able to market their shirtings and coatings in Bombay, Calcutta and other big centres at competitive rates. In spite of such efficiency, the effects of mill competition eventually drove some of the oldest factories on the West Coast to replace handlooms by powerlooms, wholly or partly.

Subsequently factories were started in other parts of Madras and Bombay. In 1906, the Government of Madras started a factory at Salem with a view to demonstrating improved processes to weavers and inducing them to adopt profitable methods of organisation, but before any advance was possible, it had to be closed down in 1910 owing to a change in the Government's policy. The professional weavers of Salem were reluctant to work in the factory. Small *karkhanas* are found to-day in the districts of Kistna, Guntur, Kurnool, Bellary, Tanjore, Madura, Coimbatore and Tinnevelly. In Sholapur, the first *karkhana* is said to have been started in the late 'nineties at the instance of the District Collector as a famine relief measure. In 1906, again, a weavers' guild was organised with a Government subvention, and under the auspices of this guild a model *karkhana* was started. Subsequently, after 1910, Padmasali weavers started a number of *karkhanas* of their own. The system was also taken up in Malegaon, Ahmednagar and other centres, mostly by Padmasali weavers. In Sholapur the *karkhana* system took fast root owing to various causes, but in places like Malegaon it has had a rather chequered course.

The *karkhanas* in the Bombay Province differ in many ways from the West Coast *karkhanas*. Most of them are seasonal and even in Sholapur, where there is some degree of permanence, they go on changing from time to time. Secondly, there is a considerable difference in the lines of production in which the *karkhanas* of Bombay and of Madras specialize ; while the former produce saris, mostly of medium and low counts, the latter weave coatings and shirtings. Thirdly, as may be seen from Table XXVII, the West Coast *karkhanas* are, on the average, larger in size than the *karkhanas* of Bombay. Fourthly, in Sholapur and other Bombay centres, technical improvements in production have not been effected to any great extent, as on the West Coast, and the business methods employed are also old-fashioned. The *karkhanadar* of Sholapur still remains the middleman-weaver in essential respects and his bringing the weavers together at a work-place has not made much difference. In Sholapur the bigger *karkhanadar* performs several functions. He (*a*) engages weavers, (*b*) engages *asamis*, who are either themselves weavers, or have small *karkhanas* under them, or get the work done through weavers, (*c*) purchases yarn wholesale, dyes it and supplies it to *asamis* and weavers, (*d*) in addition to goods manufactured in his own *karkhana*, purchases the finished goods of *asamis* and weavers and arranges to sell them, (*e*) directs production of important types of pattern, and (*f*) acts as the financier of *asamis* and weavers, and for this obtains credit from the banks. Thus he forms the apex of the industry and enables it to face the competition of mills. In other parts of Bombay, however, the *karkhanadars* are generally dependent on credit supplied by yarn dealers.

65. *Limited economies of the karkhanas.*—We have not been able to go into detail regarding the economies of handloom *karkhanas*. As no steam or electric power is employed in these factories the economies of labour and capital resulting from the congregation of the workers must be necessarily limited. However, a certain amount of economy is possible, in that raw materials can be purchased in bulk and overhead charges are reduced per unit. Even without the use of the machinery some division of labour is possible when the production is on a fairly large scale, when specialization takes place in the different processes connected with preparation, weaving and finishing. The average hand-weaver working at his home does not work regularly, being hampered in many ways, and much time is wasted. These and similar wastes can be avoided in factories; and this also results in some economy. There are, however, serious limitations to the economies available in the handloom *karkhanas*. The *karkhanadar* has to invest money on buildings and equipments in addition to what is required for the working capital and has also to pay for supervision which is particularly necessary when the raw material used is (like silk and gold thread) expensive. All this would enhance cost. Further, in a factory preparatory processes like winding, warping and sizing which are usually done in the home by women on a nominal remuneration have to be done at a higher wage and this may also enhance cost. Rao Bahadur K. S. Rao, Textile Expert to the Government of Bihar, states that the Marwari merchants at Bhagalpur who first maintained *karkhanas* found them expensive and subsequently, it would appear, they scrapped the *karkhanas* and went back to the commission agency system which was formerly in vogue. In Cannanore and Calicut, however, the *karkhana* system is still thriving and is able to pay decent wages to the employees.

There is a wide divergence in the working conditions of the *karkhanas* in the different centres. Several *karkhanas* on the West Coast present a very neat and tidy appearance and maintain a fairly well-paid managerial staff. On the other hand, in certain Bombay centres many of the *karkhanas* are dingy and cramped, managerial work is neglected and the working conditions are far from satisfactory. In most Provinces *karkhanas* do not come under the operation of the Factories Act, by reason of their not using power. In Bombay, however, handloom *karkhanas* in which more than ten labourers work have been brought under the operation of some clauses in the Act, by a declaration of the Government of Bombay under section 5, sub-sections 1 and 2 of the Factories Act. A weekly holiday and a ten-hour day are thus insisted on. In spite of all this, however, no great improvement has taken place in the working conditions of the *karkhanas*.

66. *The Entrepreneurs' position in the industry.*—Thus a class of small entrepreneurs has come to control the handloom industry in many areas. Whether as *mahajan* working through the domestic system or as *karkhanadar* with his labour housed in small factories, such entrepreneurs are to-day playing a large part not only in the marketing of handloom cloth but in its production also. In 1918, when the Indian Industrial Commission reported, such middlemen were not so powerful nor so numerous; but since then the movement in this direction has been rapid and the hand-weaving industry in the more developed areas has come into the grip of a growing number of middlemen. Some of them have indeed sprung from the professional weaving castes, but the majority are outsiders with only a financial interest in the industry, and

their monetary transactions with the weavers are not always quite fair. It is this latter fact that causes some concern to us. No doubt the popular view regarding the profits of these middlemen is rather exaggerated, as will be seen in Chapter VII. It is also true, that a certain number of the handloom factories are regular corporations coming under the Indian Companies Act; and many are running pretty much in the same way as the power-using factories. But we fear that the majority of the employers operating in the hand-weaving industry are persons who want to make quick profit by utilizing the skilled labour of a helpless working class at a nominal remuneration. In this respect the middlemen hailing from within the caste are often no better. The intervention of the financier can be a great help if his operations are sound socially as well as economically, but it can also be otherwise if sweating is allowed in any form. Hence the need for vigilance on the part of the public and the Government.

67. *Types of weavers.*—So far as the rank and file of weavers are concerned, a great change has taken place in their economic status in most parts of India. The number of independent weavers has diminished, except in certain backward areas, and the number of the employees under the domestic and *karkhana* system has increased. We will now survey briefly the conditions of the different classes of weavers.

(i) *Independent weavers.*—As already stated, there has been a drastic fall in the number of independent weavers, especially in the Provinces of Bombay and Madras where they now form only 21 and 28 per cent respectively of the total number of weavers. In other areas, however, the proportion of independent weavers is still fairly high. In Assam most of the weavers are women and they carry on weaving chiefly for home use; even when they produce for the market they pursue their business independently and seldom seek the need of middlemen. In Bihar also a great majority are still independent weavers. In the Central Provinces and Berar there is a large proportion of independent weavers but a good many of them obtain their raw materials from dealers on credit and when the cloth is sold either to the same dealer or to another the debt is repaid with interest. In some cases yarn is purchased by pledging goods previously woven which are redeemed later. In Orissa independent weavers purchase yarn on credit from the *mahajan* but are not bound to sell the cloth to the *mahajan*. They dispose of it at the *hats* and then repay the debts due to the *mahajan*. In the Punjab 58 per cent of the weavers are said to be independent weavers, but they are mostly found in the villages, and are engaged largely in producing cloth for local sale. In Madras also many weavers in the rural areas are independent. In the Bombay Province, on the other hand, *mahajans* and *karkhanadars* have been operating extensively, and except in Malegaon independent weavers are few. Many of the sturdy Momin weavers of Malegaon have been holding out against competition from mills and handloom factories. Theoretically, the economic position of the independent weaver is excellent. He is free to produce what he wants and works when it is convenient for him. He works in the midst and with the assistance of his family. But all this does not help him in his business. He has only a limited market and when there is no demand for his cloth he is not able to hold back his produce until prices improve. He often sells his cloth in the bazaar on the *gujari* (direct sale) basis because he cannot wait, and therefore when he is pressed for money he would even sell

his cloth at anything above the cost of yarn. Thus ordinarily the earnings of the independent weaver are low and his economic condition is unsatisfactory. He has to resort to the moneylenders whenever he needs any money on terms which are generally unfavourable. A large proportion of the independent weavers are indebted. It is said that the debts of the independent weavers in Malegaon amount to Rs. 100 to Rs. 150 per head on the average, on which interest is paid at rates varying from 12 to 75 per cent.

(ii) *Contract worker.*—When a weaver works on the contract basis for a merchant or *sowcar*-weaver, although he works in his own house with his own tools and with yarn bought by himself and is less exposed to risks, he loses a part of his independence. The contract is generally for 3 to 6 months for a certain number of pieces to be sold at fixed prices. Thereby the weaver knows what price he is to get, but if the yarn prices rise in the meantime he would be the loser. Thus, he has still to take some risks. This system prevails in Sholapur and other Bombay centres.

(iii) *Out-worker.*—When a weaver works with the raw material provided by the middleman for a fixed piece-wage, part of which is given as an advance, he loses more of his freedom, although he works in his own house with his loom and perhaps with appliances owned by him. His risks are less than those of the contract worker, because he does not purchase his yarn. Either yarn for a warp, or a sized warp, is given to him by the employer, along with an advance in money. In the former case, the warping will be done by the family with perhaps some little assistance from outside. In the bigger centres of Madras and Bombay, middlemen distribute sized warps and the weaver has only to weave. This class of workers is the most numerous in all areas engaged in producing for distant markets. We have collected details of the transactions of a large number of them.

(iv) *The wage-worker.*—Weavers who merely contribute their labour and possess no capital of their own are like factory-labourers in status. The average worker in the employ of an independent weaver who has more than one loom still retains some of his old social position especially if his employer is of the same caste, but those who work in *karkhanas* are regular wage-workers and in that respect are at the bottom of the ladder. As has already been stated, the professional weavers in India are averse to working in factories. In Malabar, the bulk of the factory labourers are recruited from among agriculturists, and hardly any of the professional weavers have sought employment in them. It is true that a large number of Padmasalis work in the *karkhanas* in Sholapur and Ahmedanagar but they are mostly emigrants from the Nizam's Dominions who seek a means of supplementing their scanty earnings in their villages. They are recruited somewhat on the same lines as labourers were formerly recruited for certain tea and rubber plantations. An agreement is entered into between the *karkhanadar* and the weaver, according to which the *karkhanadar* has to pay advances and even gives loans for marriages and other ceremonies on the understanding that these are to be later recovered from the wages. The agreement also makes provision for the housing of labourers and for their visits to their native places thrice a year. Mr. N. M. Joshi states in his *Urban Handicrafts in the Bombay Deccan* that " in a few agreements, curiously enough, a condition is included that whenever a weaver leaves for his native place, he must leave behind him his wife and

children in the *karkhana*, presumably as hostages in the event of the weaver trying to shirk the burden of the loan". The *karkhanadar* is also empowered by the agreement to keep back as security a certain portion (about 10 per cent) of the weaver's wages. In Cannanore and Calicut, owing to various causes, the handloom factories have built up a fairly steady labour force and the conditions of work prevailing are also satisfactory. But many of the *karkhanas* in the Bombay centres are seasonal and do not provide a steady and continuous employment to their labourers. As a result, these labourers (mostly Padmasalis) migrate from place to place. When nothing is available in the mofussil centres, they find their way to Bombay where they take up work in the mills.

68. *Wages and earnings.*—Wages under nearly all systems are paid on a piece basis. In most cases advances have to be made and they are adjusted when wages fall due. There is always considerable difference in the rates of wages paid for the various fabrics, and the rates also vary according to the counts of yarn used. Thus it is possible for skilled labourers in some *karkhanas* to earn as much as Rs. 1-8-0 per day when they weave speciality fabrics demanding skill and carefulness, but such work is not obtained every day and therefore the total earnings for the month go far below that rate. We have received from the different Provinces data regarding the piece wages paid for different types of work and the monthly earnings of weavers working under different systems. Some of these data are summarized in the three tables given below:

TABLE XXVIII.—*Statement of wages per yard according to counts in certain centres (in annas).*

	20s.	30s.	40s.	60s.	80s.
I. SARIS.					
Madras—					
Rasipuram	..	..	1·0	1·6	2·2
Udipi	..	..	1·5 to 1·6	2 to 2·6	2·5 to 3
Bengal—					
Bankura	..	1·5	1·8	..	..
Bombay—					
Gadag and Bettigari	3·4 to 3·6 (silk border).	..	4·4 to 5·3 (cotton border) 5·3 to 6·2 (silk check).	..	..
Sholapur	1·0	1·1	1·2	2·3	2·8
II. DHOTIS.					
Madras—					
Rasipuram	..	..	1·0	1·8	..
Travancore—					
Nagercoil	0·5	..	0·8	1·0	..
Bengal—					
Antpur	..	..	..	2·0	2·8

TABLE XXIX.—*Average piece wages at Cannanore (per yard).*

Coatings 28".

	Annas.
(i) Ordinary coating	1·08
(ii) Ordinary line (half plain)	1·25
(iii) Coating fine	1·25
(iv) Coating thick	1·17

Shirtings 29" to 32".

	Annas.
(i) 42/2 warp, 32/1 weft	1·00
(ii) 64/2 ordinary shirting	1·17
(iii) Fine line plain	1·33
(iv) Drill fine weft	1·33
(v) Colour shirting	1·08

TABLE XXX.—*Monthly wages of different classes of weavers.*

Province or State.	Independent weaver.		Weaver working under a master-weaver.		Weaver working in *karkhanas*.		Members of co-operative societies.	
	Busy season.	Slack season.	Busy season.	Slack season.	Busy season.	Slack season.	Busy season.	Slack season.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Assam	1 8 0	0 6 0	5 0 0	2 8 0	10 0 0	5 0 0	4 0 0	1 0 0
Bengal—								
Nadia	13 2 0	11 4 0	..	..	13 2 0	11 4 0	..	..
Bankura	10 0 0 to 12 0 0	6 0 0 to 8 0 0	10 0 0 to 12 0 0	6 0 0 to 8 0 0	..	..	10 0 0 to 12 0 0	6 0 0 to 8 0 0
Antpur	8 0 0 to 10 0 0	..	7 0 0 to 8 0 0	..	..	..	..	..
Dum Dum	15 8 0	..	..	..	..	..	..	..
Bombay—								
Bijapur	4 8 0	1 6 6	4 8 0	1 6 0	..	..	4 8 0	1 6 6
Sholapur	..	..	..	..	10 0 0 to 12 0 0	..	..	..
Central Provinces and Berar	7 8 0 to 15 0 0	6 0 0 to 10 0 0	7 8 0 to 15 0 0	6 0 0 to 10 0 0	6 0 0 to 12 0 0	6 0 0 to 12 0 0	12 0 0 to 18 0 0	12 0 0 to 18 0 0
Lucknow	15 0 0	..	15 0 0	..	..	..	..	..
Madras—								
Vizagapatam District	8 0 0 to 9 0 0	..	8 0 0 to 9 0 0	..	..	..	15 0 0	..
East Godavari	12 0 0	..	10 0 0	..	10 0 0	..	13 6 0	..
Guntur	12 0 0	..	10 0 0	..	10 0 0	..	12 0 0	..
Nellore	10 4 0	..	9 0 0	..	..	..	11 0 0	..
Cuddapah	13 8 0 to 14 0 0	..	12 0 0	..	16 0 0	..	13 8 0 to 14 0 0	..
Anantapur	5 0 0 to 10 0 0	..	6 8 0 to 13 0 0	..	..	..	7 8 0	..

Province or State.	Independent weaver.		Weaver working under a master-weaver.		Weaver working in *karkhanas*.		Members of co-operative societies.	
	Busy season.	Slack Season.	Busy season.	Slack Season.	Busy season.	Slack Season.	Busy season.	Slack Season.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Madras—								
Bellary	10 0 0	..	8 6 0	..	6 0 0 to 7 0 0	..	8 0 0	..
Chingleput	10 0 0 to 15 0 0	..	10 0 0 to 12 0 0	..	12 0 0	..	10 0 0 to 12 0 0	..
South Arcot	9 0 0	..	6 8 0	..	..	..	7 12 0	..
Trichinopoly	12 0 0	..	9 8 0	..	..	..	11 8 0	..
Madura, Ramnad	15 0 0 to 20 0 0	..	15 0 0	..	..	..	15 0 0 to 20 0 0	..
Tinnevelly	10 0 0 to 12 0 0	..	8 0 0 to 10 0 0	..	5 0 0 to 7 0 0	..	9 0 0 to 11 0 0	..
Coimbatore	7 8 0 to 10 0 0	..	7 8 0 to 11 4 0	..	..	..	..	..
Salem	12 0 0 to 15 0 0	..	9 0 0 to 10 0 0	..	8 0 0 to 10 0 0	..	10 0 0 to 15 0 0	..
South Kanara	12 0 0	..	10 0 0	..	12 0 0	..	12 0 0	..
Malabar	5 4 0	..	..	..	15 0 0	..	..	..
Orissa	10 10 0	7 15 6	10 0 0	7 8 0	10 10 0	7 15 6	10 10 0	7 15 6
Baroda	10 0 0 to 12 0 0	7 0 0 to 8 0 0	10 0 0 to 12 0 0	7 0 0 to 8 0 0	10 0 0 to 12 0 0	7 0 0 to 8 0 0	10 0 0 to 12 0 0	7 0 0 to 8 0 0
Cochin	9 6 0	3 2 0	..	..	..	..	..	..
Hyderabad	9 6 0	3 12 0 to 5 0 0	..	..	9 6 0 to 12 8 0	7 8 0 to 10 0 0	..	..
Mysore	8 0 0 to 10 0 0	..	5 0 0 to 6 0 0	..	..	..	..	..
Indore	4 0 0 to 6 0 0	4 0 0	..	..	9 0 0 to 12 0 0	8 0 0 to 12 0 0	..	..
Kolhapur and Deccan States—								
Ramdurg	7 0 0	6 0 0	7 0 0	6 0 0	7 0 0	6 0 0	7 0 0	6 0 0
Sangli	9 6 0	9 6 0	6 4 0	4 11 0			..	..
Travancore	7 8 0	..	6 0 0	..	..	..	3 12 0	..

69. *Employment.*—In the Table XXX, the wages for busy and slack seasons are separately given for most Provinces. As is well-known, employment in the handloom industry is generally unsteady, and the weaver is subject to forced idleness for long periods. Leaving aside Assam, which considers hand-weaving as a subsidiary occupation to be pursued during leisure hours, we find that even in Provinces like Bengal, Bombay and Madras, as Table XXXI

shows, there is a slack season lasting for 3 to 4 months during which employment and earnings are meagre. In Bihar, work is continuous only during four months, in Hyderabad during 6 months and in Mysore during 5 months. This is due partly to the fact that the common people make their cloth purchases during certain periods when festivals and marriages are common. There is brisk demand for cloth during those months, but at other times there is no work and the weaver has to live on his past earnings, and as such earnings hardly exist in most cases they have to borrow.

TABLE XXXI.—*Statement regarding busy and slack seasons in Provinces and States.*

Province or State.	Busy season.	Slack season.
Assam	February to May	June to August and November to January.
Bengal	....	Sowing and harvesting season.
Bihar	November to February	March to October.
Bombay	October to May	June to September.
Central Provinces and Berar	October to January	July to September.
Madras—		
Nellore	October to April	May to September.
South Kanara	September to May	June to August.
Cuddapah	July to December	January to June.
Tanjore	February to October	November to January.
South Arcot	December to February and April to October.	November to March.
Trichinopoly	January to September	October to December.
Bellary	November to May	June to October.
Vizagapatam	September to June	June to August.
Coimbatore	January to September	September to December.
Chittoor	April to December	January to March.
Chingleput	July to December	January to June.
Guntur	November to April	May to October.
Orissa	October to June	July to September.
Punjab—		
Cotton weavers	June to September	October to December.
Silk weavers	September to May	June to August.
Sind	....	Land cultivation season.
United Provinces	December to February and May to September.	March, April, October and November.
Baroda	November to March	April to October.
Cochin	September to June	June to September
Gwalior	October to March	April to September.
Hyderabad	October and December to April.	May to September and November.
Mysore	February to June and September.	July, August and October to January.

70. *Indebtedness.*—The inadequacy and unsteadiness of employment indicated above is one of the causes of the indebtedness prevalent among the handloom weavers. It has been reported from nearly all Provinces and States that the weavers are heavily in debt. In Madras as many as 90 per cent of the weavers are said to be indebted; in Mysore, 95 per cent. The central cause of the weavers' indebtedness is nearly the same as that in the case of agriculturists, unsound economic condition aggravated by improvident habits. Weavers have to borrow because they have no capital for investing in their business and because they need fairly large sums now and then for celebrating marriages and other family necessities. The independent weaver is the most liable to indebtedness because he needs money both for his business and for his family requirements; while the weaver working under the mahajan and *karkhanadar* needs loans mostly for the latter purpose. But both need advances before the production starts and the whole economy of the weaver hinges on this advance, called by various names in the different Provinces. The *dadan* system of Bengal and Bihar, the *katauti* system of the United Provinces and the *Mungade* system of Bombay-Karnataka are well-known.

The independent weaver has to purchase his yarn and therefore he borrows money, or he may obtain yarn on credit from a mahajan, in which case he has got to pay a slightly higher price for the yarn and return the money with interest at high rates. Perhaps he has also to stipulate that he would sell his cloth to the lender. Thus the loan transaction not only involves a high cost but also binds the weaver's freedom in regard to marketing. It has been estimated that as a rule when yarn is bought on credit it costs 10 per cent more than when bought on cash. Although this may not always be explicit, there are various indirect ways by which this 10 per cent could be realised by the yarn dealer. Further, if the lender also insists on cloth being sold to him the price is stipulated beforehand, and even if it is not stipulated, he being the weaker party will have to fall in with the wishes of the mahajan. Even if money is borrowed and not yarn, the interest rates are generally so high (ranging from 12 per cent to 75 per cent per annum), that the weaver is deprived of a large part of his wages. For his normal family requirements and for performing ceremonies like marriages, the weaver has to resort to the mahajan and the amounts borrowed for a marriage are too large for his income. Therefore, he finds it extremely difficult to repay them in the near future, and whatever he earns is hardly adequate for even paying interest. Usually the transaction between the mahajan and the weaver takes the form of a running account, which is seldom closed, and even if accounts are settled the result may be debit balance. Thus once a weaver gets indebted it is extremely difficult for him to extricate himself. A vicious spiral gets into motion, and it inevitably leads the independent weaver to hopeless dependence on the mahajan. Indebtedness affects not only the economic position of the weaver but also his social and moral outlook. It is a fact that in many parts of the country weavers are addicted to drink, and that a good portion of the daily earnings is thus squandered away. This, in its turn, only aggravates the indebtedness. The employer is not always reluctant to grant loans to weavers; sometimes he encourages borrowing and he uses this as a means of binding the weaver to serve him permanently. As a rule the weavers who receive loans from a mahajan consider it their duty to stick to him until the

loan is repaid. Further, lending is also financially advantageous for the employer, because not only does he get ample interest on these advances but he is also able to make other profits thereby, as already explained.

71. *Labourers' and employers' organisations.*—The weavers working as labourers have organised themselves into unions for securing their common interests and in some of the prominent *karkhana* centres this organisation has been utilized for negotiating higher wages. In Sholapur, a Handloom Workers' Union is functioning with about 1,000 members on its rolls for ventilating the grievances of workers in *karkhanas*, and owing to the effectiveness of their propaganda the weavers were able to get an increase in wage of one anna per sari in December 1939. In Mangalore organised strikes of handloom factory weavers occurred in 1937 and 1940. The strike in 1937 was a serious one and involved as many as 3,000 workers. Along with the growth of a labour movement, the employers have also organised themselves in Sholapur. In most centres where several *karkahanas* work, associations of factory owners have been set up. The following associations have been organised in Sholapur by those connected with the industry: (i) Yarn Merchants' Association, (ii) Dye Merchants' Association, (iii) Handloom Cloth Merchants' Association, and (iv) Commission Agents' (Adatiyas') Association. Some of these organisation are doing useful work. For instance, the Handloom Merchants' Association has fixed the rates of commission to be charged to agents and the period of credit to be allowed to them. This powerful organisation has had a healthy influence on prices, and on marketing as a whole, in Sholapur.

72. *A pageant of industrial systems.*—Thus the handloom industry today contains at one end independent handicraftsmen struggling for earning their bread in some freedom, and at the other factory labourers who toil for the day's wage. In between are the weavers working on different kinds of contract for the mahajan. In fact, the handloom industry today presents a pageant of all the known stages in industrial evolution. All this has not only changed the structure of the industry, but has led to a social stratification till lately little known in the country. Certain hand-weaving areas have developed features of highly specialized industrialisation and the control has passed from the producer to the financier. There is no doubt that such changes have been brought about by the exigencies of a changing situation. A few scattered small producers working by themselves could not have catered for distant markets and adjusted production according to the changing requirements of cloth whether within India or outside. No doubt the mahajan levies as heavy a toll as possible when he has the opportunity, but it cannot be denied that production would not have been maintained as it has been, had it not been for the penetration of finance into this industry. It was the mahajan that explored new markets and created new demands, and the weavers in many areas are helplessly depending on him. In this light the middlemen functioning in the handloom industry must be considered in a different light from (*e.g.*) those numerous tenure-holders that have crept into India's land system. The mahajan came in to fill a real need; he continues because that need still remains, and until some suitable organisation is set up under competent auspices, his services are essential to the industry. Even in such a new organisation the accumulated wisdom and seasoned experience of the mahajan can be utilised to capital advantage.

CHAPTER V.

Supply of Raw Material.

73. *The importance of yarn.*—The supply of suitable yarn is a problem of vital importance to the handloom industry. As a raw material, it accounts for a considerable proportion of the total costs of production of the weaver, ranging from 50 to 60 per cent or even more according to the counts and quality of the yarn. It is, therefore, clear that the availability of cheap and plentiful yarn is a primary condition of the success of the industry. Unfortunately, this primary condition is far from being satisfied at present owing to a multiplicity of factors which will be considered in some detail in this Chapter. So long as the weaver continues to buy in the dearest (yarn) market and sell in the cheapest (cloth) market, it is impossible to imagine that he is likely to make a decent living out of his work. The importance of the yarn question arises from another fact also : in the case of the handloom industry, the question of yarn is so inextricably bound up with that of finance, on the one hand, and that of marketing of the cloth, on the other, that any permanent solution of the problem will have necessarily to embrace remedies for the adjacent evils arising from moneylending and exploitation. So far as yarn is concerned, there is hardly any doubt that the handloom weaver is being mulcted on several fronts by a host of middlemen and parasites, whose existence leads to a "pyramiding" of the prices of yarn and who have for long carried on nefarious practices in regard to the quality as well as the quantity of yarn supplied, and fully exploited the ignorance, poverty and helplessness of the weavers. The malpractices prevalent in the yarn trade in many parts of the country have added to the costs of handloom industry and to that extent handicapped it in relation to its competitors. There is reason to believe that, in spite of recent legislative measures, these malpractices have not yet been wholly estopped, and, as will be fully stated later on in this Chapter, they call for a more stringent as well as vigilant application of the existing law and its extension in certain directions. In view of these and other relevant facts, to be discussed here, it appears that yarn by itself is a tremendous differentiating factor, which while it handicaps the handloom in a variety of ways is of substantial assistance to the mill industry. As a matter of fact, several of the witnesses who appeared before us expressed the opinion that if the handlooms could be put right as to the supply of yarn of the same quality and at the same price as the mills were able to obtain, that by itself would enable the hand-weaver to compete on equal terms with the mills. Though we cannot say definitely whether this would be so, there is no doubt that the yarn factor is one of the main causes of the inability of the weaver to hold his own against the competition of mills and powerlooms. Moreover, the fact that the handloom industry is totally dependent upon its rival, the mill industry, both foreign and internal, for the supply of its basic raw material, very much weakens its competitive position. The truth of this is glaringly shown by the present situation in the yarn market and its repercussions on the fortunes of the handloom industry. When the Committee undertook their tour at the beginning of 1941, conditions regarding the supply of yarn to the handloom industry were bad enough, but as the year

wore on they grew worse, and everywhere there was a hue and cry against the enormous rise in the prices of yarn and the devastating havoc wrought by it upon the handloom industry. This rise in prices is a passing phase brought about by the war, and has been under the active consideration of the Government of India. As we are concerned with the basic and permanent aspects of the handloom industry, the matter does not fall within the scope of our terms of reference, and hence we have omitted it from consideration here.

74. *Organisation for the marketing of yarn.*—The organisation for the marketing of yarn consists broadly of two parts: firstly, the spinning mills' and importing firms' agents for the selling of yarn to the middlemen and weavers; and secondly, the middlemen's organisation for selling yarn to the weavers. The former are more a part of the machinery of the mill industry for pushing the mills' sales, while the latter are the connecting links between them and the weavers. As the sale of yarn to the weavers is a pivotal problem of the handloom industry and much depends upon a regular and adequate supply of yarn at economical prices, we propose here to dwell briefly upon the selling arrangements made by the mills and middlemen, and their consequences upon the prices of yarn and the fortunes of the hand-weavers.

The mills' selling organisation is pyramidical in its structure starting with the agent or agents at the top and ending with the middlemen, brokers and yarn dealers wholesale or retail, as the case may be. The agents sometimes have their sub-agents also in important weaving centres. So far as the mills are concerned, the system of sale is based largely upon forward contracts and rarely upon ready transactions. The mills very rarely sell direct to the small dealers or weavers' co-operative societies, ready or forward yarn against cash. The agents generally do not buy yarn from the mills themselves, but furnish the mills with the names of merchants who are willing to make forward contracts on their offers of prices. When the offers are accepted, the contracts are made through the agents with the merchants, and the agents stand security for the latter, the railway receipts also being forwarded through the agents to the respective purchasers. A definite commission is paid to the agents for their services, which does not generally exceed 2 or 3 per cent of the sale price and which may be as low as $\frac{1}{4}$ per cent. It is the responsibility of the agent and his sub-agents to see that due payment is made on account of business transacted through them by yarn dealers. The sub-agents are generally appointed by the mills, but the agents also in some cases have their own men acting as sub-agents. After the agents and sub-agents come the yarn merchants, who either make their purchases from the agents or direct from the mills, especially from those which have no agency system for marketing of yarn. These dealers sell their yarn to other retail dealers in the market from whom the yarn finds its way to the handloom weavers. Apart from such dealers, there are also brokers who act on behalf of yarn dealers and others and make cash or forward purchases on a small brokerage. Finally, there are others who are neither dealers nor agents, who sometimes do business for speculation, purchasing and selling yarn on forward contracts. This speculative element in the yarn market is in its very nature unstable, and, as shown in the case of the recent rise in yarn prices, can completely distort the structure of yarn prices. The system of forward contracts often enables them to stock yarn in favourable seasons and actually undersell the mills

themselves in brisk seasons, thus earning higher profits. Another feature of the yarn market, which is perhaps common to all speculative markets, is that any rise in the wholesale price of yarn is immediately followed by a rise in the retail price, while it takes a long time for the retail price to adjust itself to the wholesale price when it falls. This factor also provides the dealer with an opportunity to make profits at the expense of the final consumer, *viz.*, the weaver.

The system for the marketing of foreign yarn is similar to that of indigenous yarn, with the difference that the importing firm takes the place of the agent. The importing firms are located not only at some of the ports like Bombay, Calcutta and Madras, but also in the interior of the country at important weaving centres like Amritsar, Benares and Hyderabad, and they are in complete control of the local yarn markets. They sell the yarn to dealers in the bigger centres, who retail it further to the smaller dealers who, finally, sell it to the weavers.

75. *The yarn dealer.*—The yarn dealer, who is the connecting link between the mills' machinery of marketing yarn and the handloom industry, deals with the weaver directly or through the master-weaver. The terms on which he sells his yarn and the circumstances which govern his relationship with the weavers will be discussed presently. Here it may be stated that, be the dealer big or small, he wields a controlling influence over the handloom industry owing to the fact that he combines within himself,—unless he shares this function partly with the *sowcar*-weaver,—the triple function of yarn dealer, financier and cloth-seller. In this triple capacity, he has rendered himself almost impregnable against possible reformist assaults. The other two functions are analysed in their appropriate places; here we are concerned with him only as the yarn dealer. There is usually in every area a chain of yarn dealers ranging from the big city merchant to the smallest fry in the village. The weavers of smaller centres get their supplies of yarn from the nearest centre, which is served by yarn dealers or from itinerant dealers who visit the village *hats*, shandies or bazaars or *penths* on bazaar days. As may be expected, they usually combine this business with that of moneylending and purchase of cloth from the weavers against the yarn. This functional analysis has been made elsewhere and we do not wish to repeat it here. In regard to some of these functions, the yarn dealers are relieved by the *sowcar*-weavers and by the co-operative societies. Where the *sowcar*-weaver provides yarn to the weavers, he naturally bears the risks of the fluctuating prices of yarn in relation to those of cloth. The *sowcar*-weaver generally buys from the bigger yarn dealers with whom he keeps a regular account. But very often the *sowcar*-weaver himself is also a yarn stockist. On the other hand, the co-operative society does not engage itself in any speculative business, but acts as the authorised middleman, working on bare profits, for the member weavers. The societies buy yarn from mills or big yarn dealers at spot prices, according to the suitability of prices offered.

In some cases the weavers in the remote villages do not get the yarn at their village shops but they have to travel long distances to get yarn from the nearest market or *hat*, which sometimes may be 10 to 15 miles from his home and meets perhaps once or twice a week. The frequent visits to the *hats* make it necessary for the weavers to spend 2 annas or more on account of conveyance, such as country boats, in places like Madhobdi and other parts

of Bengal. Apart from the temporary stoppage of the loom, these payments add to the yarn price, considering the smallness of the quantity of yarn bought each time. This addition works up to a very high percentage on the cost of the raw material. Again, when handloom weavers buy yarn at a higher price without a simultaneous rise in the price of their finished goods, they naturally have to meet the extra cost from their earnings, and to this extent they are at a disadvantage *vis-à-vis* the mills. From the standpoint of the competitive position between the handloom weavers and the mills, it would appear that a combined spinning and weaving mill would get its yarn in the weaving shed at cost price while the handloom weavers get the same at a price, in the majority of cases, much higher than even the retail price. This is a matter, therefore, in respect of which the handloom weaver is greatly handicapped. In the case of weaving mills, they can get the yarn in bulk at a wholesale price from the spinning mills direct; a handloom weaver has got no such opportunity.

The cost of production of the handloom weaver, so far as yarn is concerned, becomes high on account of (*a*) the profits, legitimate and otherwise, made by the chain of middlemen, (*b*) packing, freight and handling charges, cartage, etc., (*c*) interest charges, and (*d*) the various other charges such as insurance for fire risk, godown rent, commission and discount paid by the series of middlemen.

76. *Practicability of direct sale of yarn to weavers.*—As has already been stated the prevalence of a multiplicity of middlemen at every stage in the marketing of yarn leads to a pyramiding of yarn prices and provides numerous opportunities to unscrupulous traders to resort to several malpractices whose incidence ultimately falls upon the poor handloom weaver. It is, therefore, worth consideration whether it should not be feasible for the mills or for the Governments of Provinces and States to devise some system by means of which the hegemony of the yarn dealers might be broken down, and they should be able to reap no more than a legitimate profit. With a view to this end, suggestions have from time to time been made for bringing the handloom weaver into direct contact with the mills for the purchase of yarn. In this connection, we may quote the following from the Bombay Millowners' Association's memorandum: "In the year 1935, when the Department of Industries drew up a scheme for development of the handloom industry in the Bombay Presidency, the Millowners' Association, Bombay, made arrangements, at the instance of the Director of Industries, for the supply of yarn to the Weavers' Co-operative Societies from its member mills. Yarn was to be sold in small lots at wholesale rates, payment being made by the societies within a few days of the presentation of the railway receipt. Actually the number of enquiries from Co-operative Societies which were received by the Association or its member mills was very small and after a year or two died away altogether. Nevertheless, the Association and the cotton mills would be willing to collaborate in any businesslike attempts to reduce the costs of production of mill-spun yarn to the handloom industry, provided that payments for yarn were made promptly against railway receipts. At the same time, it must be remembered that mills at present sell their yarn in bulk and any new system of distribution that could be devised would probably have to be on a bulk-buying basis." In this connection, it is also pertinent to mention an experiment tried in Madras, where the Madras Handloom

Weavers' Co-operative Society has arranged with some important mills for the direct sale of yarn to the primary weavers' societies on the guarantee of the Provincial Society. Yarn is supplied by the mills F.O.R. to the nearest railway station, and 60 days' credit is allowed for the payment of the value of yarn. If a primary society is not able to discharge its obligations within that period, the Provincial Society settles the account with the mill concerned and debits the loan account of that primary society. Indents for yarn are generally placed through the Provincial Society. As stated in the memorandum of the Registrar of Co-operative Societies, Madras, "This procedure has the advantage of the primary societies obtaining yarn at the wholesale rates ruling in the market without the intervention of a number of intermediaries. Though this may appear at first sight advantageous to the weavers at all times, it is not so in practice. The mills charge the societies rates ruling on the date of despatch. This rate is not always necessarily lower than the price of yarn in the local market. Merchants usually stock yarn at favourable prices and, when the mills raise the price of yarn owing to forward contract bookings, they undersell the mills. To quote an instance, when Messrs. Madura Mills Co., were quoting 20s at Rs. 5-8-0 on 31st January 1941, the yarn merchants at Chittoor sold it for Rs. 5-0-0. In such circumstances, the societies find it advantageous to purchase their requirements from local dealers rather than directly from the mills. The other disadvantage is that mills are not able to supply the requirements of weavers when they are fully booked against forward contract orders".

Wherever attempts have been made to purchase yarn direct from the mills, the mills' quotations have been almost always higher than the ruling rates in the bazaar. The explanation offered (in the quotation in the previous paragraph) by the Registrar of Co-operative Societies must indeed be accepted as correct when the wholesale yarn dealers have purchased yarn in slack seasons; but if merchants always purchase yarn in slack seasons, there can be no slack season for the spinning mills and prices of yarn over a period are bound to be "ironed out". That explanation must, therefore, be held as only partially and occasionally true. In any case, in view of the fact that there is a distinct pyramiding of the prices of yarn, brought about by the presence of a multiplicity of middlemen, there must remain a margin of advantage available to the weaver, if he is able to get his yarn at the source rather than at the end of the chain of dealers. In our opinion, the explanation is to be partly found in the mills' unwillingness to interfere with the business of their agents. This has been brought to our notice by the Director of Industries, Bihar, who observes: "The Bihar Cottage Industries had been getting yarn direct from mills for some years, but this Government organisation is now asked to get its supplies through their agents at Calcutta. As each mill has its own selling agents, it is not possible for the weavers to get direct supplies from the mills, even when they are prepared to place large orders." Seeing that the agents get a substantial commission on sales effected through them, it is not surprising that they should object to direct sales to the weavers or weavers' societies. However, there are two points to be noted in this regard. In the first place, owing to the cost of transport and incidental charges, there is in most parts of the country something like a regional monopoly of particular mills or groups of mills. Secondly, where the question is one of common interest, it is not at all difficult for mills to come to some sort of tacit agreement as a matter of trade practice regarding bulk sales. It is

an understandable business proposition, and one cannot necessarily blame the mills for the situation thus arising.

77. *The prices of yarn.*—The marketing organisation for yarn supply decides the structure of yarn prices. As indicated before, corresponding to the pyramidical structure of the selling organisation, there is a pyramiding of prices also. From the wholesale stage to that of final retailing, each dealer adds his own quota of commission to the price of yarn, so that by the time the yarn reaches the hands of the weavers, the price becomes considerably inflated. Naturally, the proportion of these additions in the final price depends upon the number of intermediaries and the distance of the market to the yarn producing centres. The prices of yarn are generally lower by a few annas per lb. in the South Indian centres in which are located some of the biggest spinning mills of India. But in distant markets like Assam, Bengal, Bihar, the Punjab, Orissa, and Sind, there is a considerable margin and the prices are somewhat higher. These inter-provincial differences in the prices of yarn can be seen in the following three tables showing the prices of yarn in principal areas during 1938 and 1941. To some extent, the variation is no doubt due to differences in the quality of yarn sold depending upon the brand or make, etc., as also to the fact that except in the last one of the three tables, quotations are average for a few days. But the general tendency is unmistakable.

TABLE XXXII.—*Prices of cotton yarn (10 lbs. bundle) during January 1938 in various Provinces and States.*

Province or State.	10½s.	20s.	24s.	32s.	40s.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Madras—					
Madras City	..	4 8 0 (Coimbatore yarn). 4 10 0 (Madura yarn).	..	..	6 10 0 (Coimbatore yarn). 6 8 0 (Madura yarn)
Orissa	..	5 0 0	..	6 0 0	7 0 0
Bihar	3 5 6	..	..	..	..
Bengal—					
Calcutta	..	..	..	..	6 7 0
Dacca	3 8 0	..	..	6 8 0	7 0 0
Nadia	..	4 14 6	5 10 0	6 2 0	6 15 6
Assam	..	..	..	..	..
United Provinces	..	..	..	..	..
Central Provinces and Berar	3 11 0	4 12 0	5 6 8	6 5 0	6 12 0
Sind	..	..	..	..	..
Punjab	2 14 0	4 10 0	..	..	6 0 0
Bombay	3 7 10	4 7 8	4 13 6	5 15 10	Not quoted.
Baroda	..	4 4 0	4 10 9	..	..
Mysore	3 12 0	4 9 0	5 1 0	..	6 8 0
Gwalior	..	..	..	..	
Deccan States—					
Ichalkaranji Jahagir	..	4 6 0 to 4 10 0	..	..	6 8 0 to 9 0 0
Sangli	..	4 8 0	..	..	6 8 0

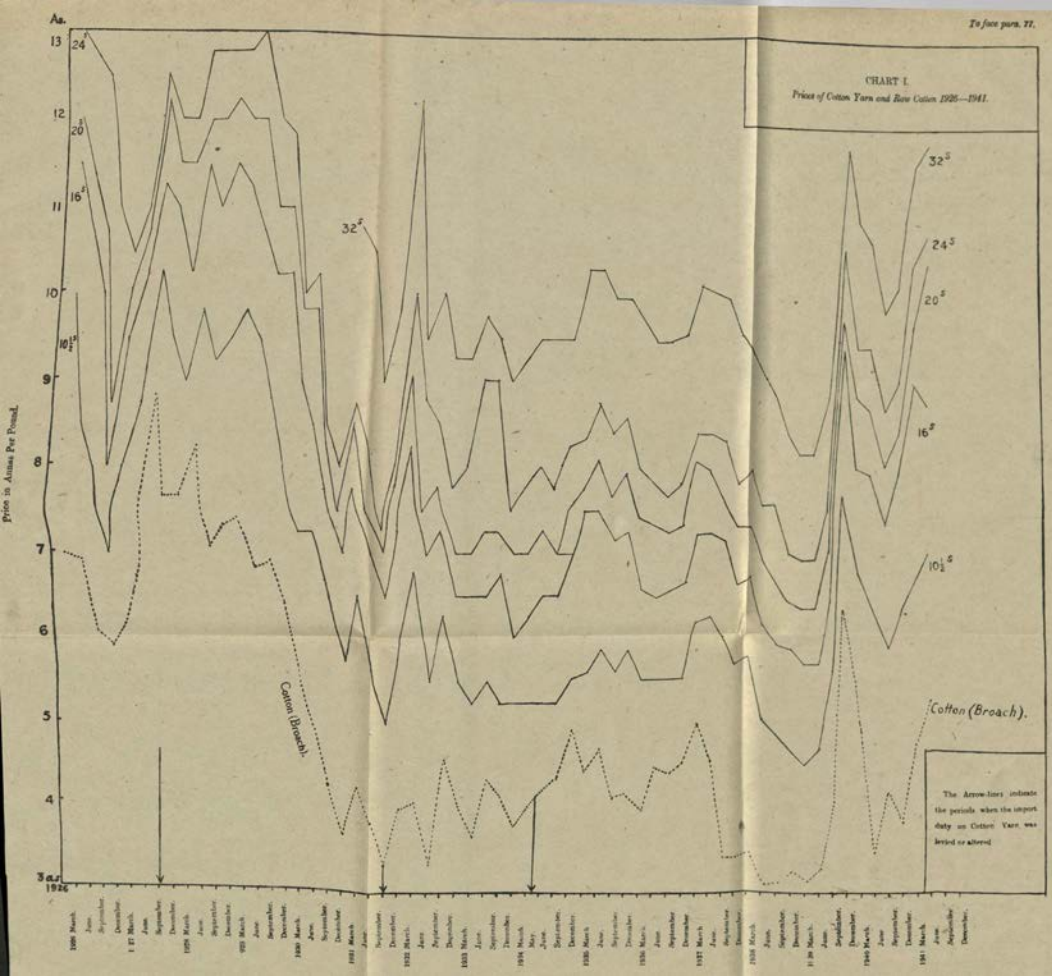
As.
Price in Annas Per Pound.
13
12
11
10
9
8
7
6
5
4
3 as 1926
24s
20s
16s
10½s
32s
32s
24s
20s
16s
10½s
Cotton (Broach).
Cotton (Broach).
CHART I.
Prices of Cotton Yarn and Raw Cotton 1926—1941.
The Arrow-lines indicate the periods when the import duty on Cotton Yarn was levied or altered.
1926 March
June
September
December
1927 March
June
September
December
1928 March
June
September
December
1929 March
June
September
December
1930 March
June
September
December
1931 March
June
September
December
1932 March
June
September
December
1933 March
June
September
December
1934 March
June
September
December
1935 March
June
September
December
1936 March
June
September
December
1937 March
June
September
December
1938 March
June
September
December
1939 March
June
September
December
1940 March
June
September
December
1941 March
June
September
December

TABLE XXXIII.—*Prices of cotton yarn (10 lbs. bundle) as between 15th March and 1st April 1941 in various Provinces and States.*

Province or State.	10½s.	20s.	24s.	32s.	40s.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Madras—					
Madras City	..	5 8 0	..	6 12 0	8 0 0
Madura	..	5 12 0	6 4 0	6 14 0	8 12 0
Coimbatore	..	5 5 0	..	..	7 11 0
Orissa	..	6 0 0	6 8 0	7 0 0	8 12 0
Bihar	3 9 6	5 4 0	..	7 2 0	8 2 0
Bengal— Calcutta (according to different mill yarns).	..	5 4 0 to 5 6 0	5 12 0 to 6 1 0	6 10 0 to 7 0 0	7 15 6 to 8 5 0
Dacca	4 9 0	..	..	7 8 0	8 12 0
Nadia	..	5 0 0	5 12 0	6 12 0	7 8 0
Assam	..	5 14 0	6 8 0	7 4 0	9 0 0
United Provinces	4 8 3	..	..	..	..
Central Provinces and Berar	4 2 0	5 10 0	6 6 0	7 5 0	..
Sind	..	..	..	..	7 8 0
Punjab	3 8 0	5 14 0	..	..	8 0 0
Bombay—	4 0 0	5 12 0	..	..	8 2 0
Yarn exchange (Mill-owners' figures).	4 2 8	6 0 8	6 8 2	7 3 10	8 12 0
Baroda	..	5 5 0	5 11 6	5 15 0	5 15 0
Mysore	4 6 0	5 10 0	6 2 0	..	8 6 0
Gwalior	..	5 7 6	..	..	..
Deccan States— Ichalkaranji Jahagir	4 14 0 to 6 12 0	..	..	..	7 10 0 to 11 2 0
Sangli	..	5 10 0	..	..	8 10 0

TABLE XXXIV.—*Prices of cotton yarn (10 lbs. bundle) on 1st April 1941 in Provinces and States.*

Province or State.	10½s.	20s.	24s.	32s.	40s.
	Rs A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Madras—					
Madras City	..	5 8 0	..	6 12 0	8 0 0
Madura	..	5 8 0 to 5 5 6	..	..	7 15 0
Coimbatore	..	5 5 0	..	..	7 11 0
Bombay	4 0 0	5 12 0	..	..	8 2 0
Punjab	..	6 2 0	7 2 0	8 4 0	9 0 0
Bihar	..	5 4 0	..	7 2 0	8 2 0
Assam	..	5 14 0	6 6 0	7 4 0	9 0 0
Bengal— Calcutta	..	5 4 0 to 5 9 6	5 12 0 to 6 1 0	6 10 0 to 7 0 0	7 15 6 to 8 5 0
Mysore	..	5 10 0	..	..	7 14 0
Gwalior	..	5 7 6	..	..	..

78. *The yarn-dealer's profit margin.*—It was stated by several witnesses that the yarn dealer, when supplying yarn on credit makes an addition to the price which may be anything from 4 to 25 per cent on the cost price of yarn. We have not been able to assess the exact amount of profit made by the yarn dealer on such transactions. Nor were we able to go through the account books of the yarn dealers who were reluctant to produce them. Whenever we visited a retail yarn dealer we found him not very communicative and sometimes rather abrupt in his behaviour. It is not, therefore, possible to lay down any definite figure as representing the margin between the *ex*-mill price of yarn and the price that the final purchaser, the weaver, has to pay for it. Moreover, it is bound to vary from place to place, depending upon the number of intermediaries, the situation of the market, etc. Apart from the profit margin, there are two other possible accretions to be taken into account. Firstly, there is the practice of yarn dealers to enhance the retail price arbitrarily without any relation to market conditions. There is reason to suppose that in many small centres, where the dealers have some sort of monopoly or are in tacit agreement with one another, this must be happening. Secondly, when yarn is sold on credit, there is an addition of a few annas per bundle, and if payment is not made in the stipulated time, this charge may increase further according to the interest charged.

79. *The extent of the profit margin.*—The Surat Chamber of Commerce puts the price disadvantage due to this margin, from which the handloom suffers in comparison with the mills, at between 5 and 10 per cent in respect of yarn and at between 3 and 6 per cent in respect of the finished product. The Registrar of Co-operative Societies, Bengal, estimates 1½ annas to 3 annas in the rupee, *i.e.*, 9½ to 19 per cent as the excess charged. The Director of Industries, Bengal, has furnished detailed information bearing upon this problem, based on an enquiry specially conducted by two investigators of his department, in the Dohar and Lohajang areas of Dacca, in the last week of June 1941. This material indicates that the local distributing agencies of yarn fix up the price rather arbitrarily and carry on a profiteering business. There are four important yarn dealers in the area who purchase yarn from Calcutta, dye it themselves and sell it to the *paikars* of different localities of Dohar and Nawabganj. One such dealer is in Palanganj and three at Jayapara. The weavers do not and cannot buy yarn direct from these merchants. They buy yarns at retail prices from the local dealers who purchase at the wholesale rates from these big merchants. The big mahajans of Jayapara and Palanganj told the investigators that they made a profit of only 2 annas per bundle of 10 lbs. of grey yarn, over their buying price (*i.e.*, over the Calcutta wholesale prices and freight and other charges), while the *paikars* who are the middlemen between them and the weavers, make a profit of 4 annas per 10 lbs. on the same yarn in cash transactions and 8 annas in credit

transactions. However, the statistics of actual prices, collected by the investigators and reproduced below in Table XXXV, do not bear out this statement :—

TABLE XXXV.—*Prices of grey yarn (Madura Mills, 40s grey, Kalamkari) in June 1941.*

	Price per bundle of 10 lbs.
	Rs. A. P.
1. Wholesale price at Calcutta on 26th May 1941	8 13 0
2. Local mahajans (including freight) at Palanganj	9 13 0
3. For local *paikars* buying from the mahajans at—	
Palanganj	9 15 0
Jayapara	9 4 0
Agla	9 6 0
Balmatachar	9 10 0
4. Retail selling price of *paikars* at—	
Jayapara	9 14 0
Agla	9 10 0

The following table is also very illuminating in this respect :—

TABLE XXXVI.—*Prices of dyed 40s yarn (as declared by the mahajans and paikars) in June 1941.*

Kind of yarn.	Local Mahajan's wholesale price to *paikars* for 10 lbs. bundle.	Paikar's buying price for 10 lbs. bundle.			Retail selling price for 10 lbs. bundle.		
		Jayapara.	Balmata-char.	Agla.	Jayapara.	Balmata-char.	Agla.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Deep blue	13 0 0	14 0 0	13 4 0	13 4 0	14 8 0	13 8 0	13 8 0
Light blue	10 4 0	12 8 0	12 4 0	11 12 0	13 2 0	12 8 0	12 0 0
Deep red	11 4 0	11 12 0	11 12 0	..	12 0 0	12 0 0	..
Light red	11 4 0	11 4 0	11 8 0	..	11 14 0	11 12 0	..
Dhani	12 10 0	13 12 0	12 10 0	13 0 0	14 1 0	12 12 0	13 4 0
Parrot green	17 0 0	18 10 0	..	17 5 0	19 0 0	..	17 8 0

If it is assumed that the freight charges from Calcutta to Jayapara work out at 2 annas per bundle in grey yarn of 40s, then the difference of 7 annas per bundle (between Rs. 8-13-0 Calcutta price and Rs. 9-4-0 Jayapara price) is hard to reconcile. Again from a reference to the table of dyed yarn, it appears that deep blue has been sold by the local mahajan at Rs. 13 per bundle and a great variation is noticed in the *paikar's* buying price at the same time and in the centres close by. The same discrepancy is evident when the retail prices are examined. All these go to show that the actual margin of profit cannot be disclosed by simple enquiries. It requires drastic legislation to stop the scandal of such high profit-making on a raw material at the expense of a helpless class of people.

The Director of Industries, Bengal, has also given the pre-war cost of dyeing per bundle of 10 lbs. of grey yarn of 40s and the cost of dyeing in June 1941. By comparing the cost of 10 lbs. of grey yarn of 40s at the wholesale price as prevailing at Calcutta on 26th May 1941 and adding 2 annas per bundle for freight, an idea of estimated profit of the local wholesale mahajan may be gathered from the following table :—

TABLE XXXVII.—*Mahajan's margin of profit on dyed yarn in Bengal (June 1941).*

Name of the shade.	Pre-war cost of dyeing per bundle of 10 lbs.	Cost of dyeing per bundle of 10 lbs.	The Calcutta wholesale price of 40s grey yarn (Madura) on 26th May 1941.	Freight and handling charges at 2 annas per bundle.	Total of cols. 3, 4, 5 estimated cost of dyed yarn per bundle of 10 lbs. at the two centres.	Mahajan's wholesale price.	Average retail price in the 3 centres.	Percentage excess of (8) over (6).
1	2	3	4	5	6	7	8	9
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Deep blue .	2 4 0	4 6 0	8 13 0	0 2 0	13 5 0	13 0 0	13 5 3	..
Light blue .	0 10 0	1 9 0	8 13 0	0 2 0	10 8 0	10 4 0	12 8 8	19·50
Deep red .	0 15 0	2 10 0	8 13 0	0 2 0	11 9 0	11 4 0	12 0 0	3·78
Light red .	0 11 0	2 6 0	8 13 0	0 2 0	11 5 0	11 4 0	11 13 0	4·42
Dhani . .	2 4 0	4 12 0	8 13 0	0 2 0	13 11 0	12 10 0	13 0 8	4·78
Parrot green	4 0 0	8 10 0	8 13 0	0 2 0	17 9 0	17 0 0	18 4 0	4·57

A comparison of the figures in column 6 with those in columns 7 and 8 leads us to the same conclusion as drawn by the Director of Industries, Bengal, *viz.*, that the wholesale rates as given by the mahajan to the investiga ors do not reveal the actual position ; otherwise, there cannot be such a wide divergence between the estimated value and the actual wholesale prices which have most probably been quoted at a low rate. If, however, the average retail prices as shown in column 8 are considered, except in the case of the prices of deep blue yarn, the other items more or less support the complaints we have received from the weavers. It may be stated here that the retail prices quoted probably are much lower than the actual prices.

The Registrar of Co-operative Societies, Madras, has supplied a set of similar figures as shown below :—

TABLE XXXVIII.—*Mahajan's margin of profit in Madras (31st January 1942).*

	Actual price per 10 lbs.	Price at which sold to hand-loom weaver per 10 lbs.	Percentage excess.
	Rs. A. P.	Rs. A. P.	
East Godavari 20s	4 12 0	5 5 0	11·9
South Arcot 20s	4 12 0	5 0 0	5·28
Bellary 40s	6 8 0	6 14 0	5·80
Vizagapatam 20s	4 12 0	4 14 0	2·64

At the *hats* at Puthiajani (Tangail) and at Chaumuhani (Noakhali District) in Bengal we came across people who were selling yarn to the weavers. These dealers stated that they bought the yarn from the retail dealers and sold it to the weavers who wanted to buy a few hanks (less than one knot), *i.e.*, up to 9 hanks in 40s and 19 hanks over 40s. This only shows that the retail dealers are out to make more profit by sticking to the unit of one knot and deputing men who appeared to us to be the assistants of their own shops, thus giving an impression that independent transaction was being effected by these men.

80. *Malpractices in the yarn trade.*—There are factors, in addition, which help the pyramiding of the prices of the raw materials. These consist of various malpractices which may be briefly stated as follows :—

(*a*) Lower counts of yarn are passed as higher counts.
(*b*) Correct counts of yarn are sold but the hanks are shorter in length.
(*c*) Slightly higher counts of yarn are passed on as lower counts.

(*a*) *Sale of yarn of lower counts as of higher counts.*—The standard packing of the number of knots in bundles of 10 lbs., or 5 lbs. is not followed. The standard packing is as follows :—(1) In bundles of 10 lbs. from counts 6s to 16½s, the number of full knots (10 hanks each) in the bundle are the same as the counts of yarn. When packed in half knots, the number of ½ knots are double the number of counts. Bundle of yarn with half counts, *e.g.*, 16½s, 14½s, 10½s, are usually packed in ½ knots, *i.e.*, a bundle of 16½s contains 33 half knots, a bundle of 14½s contains 29 half knots, and a bundle of 10½s contain 21 half knots in a bundle of 10 lbs. Each half knot is termed a head. (2) From 20s to 40s—bundles of 10 lbs. contain usually the same number of heads (knots of 10 hanks each). (3) In some cases of 40s and from 60s to 100s, the bundles are made in 5 lbs., a 5-lb. bundle of 60s will have 30 heads (each head containing 10 hanks), *i.e.*, the number of heads is equal to one half the counts number. (4) In cases of 60s and upwards, the heads are also tied with 20s hanks. For instance a 90s, 5-lb. bundle would contain 22½ heads.

By counting the heads in each case the weaver has got into the practice of assuring himself that he buys the correct counts of yarn. His practice is to buy the required quantity by *knots* and he does not check the weight of

these knots. It is here that the weavers are cheated. Sales of yarn in bundles marked 8/10, 10/12½, 16/20, 26/40, 30/40 are common in the market. The first number, *viz.*, 8, 10, 16, 26, 30, in these stands for the counts. The second number, *viz.*, 10, 12½, 20, 40, 40, stands for the number of heads in the bundle of 10 lbs. This means that a bundle of 10 lbs. marked 8/10s would contain 80 hanks of 8s counts made into 10 heads of 8 hanks each. The labels are removed from the bundle. At the time of sale the bundle is handed over to the weaver who counts the number of heads and gets himself satisfied that he is buying 10s yarn since the bundle is packed with 10 heads. Similarly, he is led into the belief that he is buying 12½s, 20s, or 40s counts of yarn when actually yarns of 10s, 16s, 26s, or 30s are being passed on to him.

(*b*) Then, again, this advantage is taken in another way. The weavers are supplied the correct counts of yarn but the hanks are not of the standard length of 840 yards.

(*c*) *Sale of higher counts of yarn for lower counts.*—(1) The yarns of counts 10½s, 12½s, 16½s are packed in standard bundles of 10 lbs. respectively containing 21 heads (½ knots of five hanks each), 25 heads (½ knots of 5 hanks each), 33 heads (½ knots of five hanks each), and in each case, the dealer takes out ½ knot or one head and passes the yarn as 10s, 12s, or 16s. We are told that the dealer claims this as his legitimate share permitted by a so-called trade usage. (2) A 10-lb. bundle of 24s would contain 24 knots. This is dyed and four knots are taken out and the balance sold as 20s. The price of a bundle of 24s is, say, Rs. 5-4-0 or 3½ annas per knot; thus the price of 4 knots would be 14 annas. The price of a bundle of 20s is, say, Rs. 5. The dealer, therefore, realises Rs. 5, when the price of 20 knots of 24s is only Rs. 4-6-0.

Again the yarn which is sold to the handloom weaver does not bear any indication as to the standard tensile strength for the particular counts. The combined spinning and weaving mills, in the majority of cases, sell yarn, which is only fit for the weft and which is used as warp by the weavers. Besides, there are "rejects", *i.e.*, yarns of various counts and strengths which are packed together and exposed for sale. The weaver can only come to know of this or other defects at the time of preparing the yarn. Then, again, the yarn dealers particularly have yarns spun with a very low tensile strength which are passed on to the handloom weavers. A spinning mill in Bombay showed us an enquiry from a yarn dealer which asked whether that particular mill could supply 10s counts yarn spun out of a cotton mixing fit for 6s counts.

Apart from the above malpractices, in respect of dyed yarn there prevails the practice of adding an extra amount of weighing material to the yarn contents in the process of dyeing. Bundles of dyed yarns are to be seen in the market marked with 40s/40s, 44s/40s, 54s/40s. The first marking, *viz.*, 40s, 44s, 54s, indicates the counts of yarn in the grey state before they are dyed, while the second marking, *viz.*, 40s, in each case relates to the counts of the yarn after dyeing. The difference between 40s/40s, and 44/40s and 54/40s, lies in the fact that, in the first instance, *i.e.*, 40/40s while dyeing 40s grey yarn no weighing material has been added. The idea has been to bring the weight of 40 hanks of 44s and 54s (which is less than the pound) to the exact weight of one pound after dyeing by adding extra weighing material, so that these yarns could be passed as 40s.

81. *Views of Millowners' Associations and others regarding malpractices.*— The existence of malpractices has been admitted by the Millowners' Associations, and other bodies. For example, the Millowners' Association, Bombay, in their reply to our questionnaire state: "The Association has always set its face against malpractices such as short reeling, false packing, over-declaration of weight, etc. As a result of representations made during the last five or six years the Merchandise Marks Act has recently been amended, and, provided the new provisions are strictly enforced, complaints of the character just referred to are likely to disappear with considerable advantage to the handloom weaver. The malpractices which existed in the past have been wholly due to unscrupulous competition between yarn dealers". It is apparent from the above quotation that the Association consider that the practices will disappear if "the new provisions of the Act are strictly enforced". It is also obvious that so long as that does not happen, they cannot be a mere matter of the past. The Association also refer to the Bombay Weights and Measures Act under which short length and short weight are offences. The Ahmedabad Millowners' Association are not aware of any unfair practices in the yarn trade, but observe: "It may incidentally be mentioned, however, that in the past there was a practice of indicating higher counts of the bundles, if the merchants so desired, but this fact was known to all the dealers and consumers and was virtually a recognised practice. After the amendment of the Merchandise Marks Act, however, the practice has ceased." Here also the practice of false packing is mentioned as having existed in the past only. It should be noted, however, that in their oral evidence before the Committee, the representatives of the Association stated that the middlemen merchants were at the bottom of the trouble as they deliberately bought poor or falsified yarn from mills, and that the mills had to supply whatever type of yarn the middleman asked for and what he later on did with that yarn was no concern of the mills. We do not share this opinion of the Association but consider that the mills should make it a point that these malpractices are definitely stopped. The Bengal Millowners' Association, however, observe: "At least one unfair practice is known in the Calcutta market. There are a few unscrupulous mills who do not always give the actual counts. For example, in 22s counts there should be 22 hanks of 5,600 yards each, but in actual practice these mills make 26 hanks of 5,000 yards each out of the above yarn and pass it off as 26s counts, and charge a higher price for it. The difference between the prices of 22s and such 26s counts is approximately 4 annas per bundle of 5 lbs. The mills take recourse to such shady practices at the instance of the yarn dealers..... It may be mentioned that no cotton mill in Bengal ever resorts to such questionable practice." The Marwari Chamber of Commerce observe that "certain malpractices with regard to the length, weight, packing, etc., exist in the yarn trade", and that "some mills spin what is known as *bhanga suta*". The Surat Chamber of Commerce also admit that "the Indian mills and Indian mill yarn merchants, with very few exceptions, have not been able to set up their reputation regarding the length, weight, strength, etc., of the yarns marketed by them", and that "both mills as well as their yarn merchants are responsible for this state of things".

82. *The extent of the evil of malpractices.*—As regards the weavers' associations, complaints have been numerous in the north, especially in the Provinces

of Bihar, Bengal, the United Provinces, the Central Provinces, and Bombay (North), but in the south, barring a few exceptions, there have been no complaints. This is probably due to the care devoted by some of the important spinning mills of the south to the production and supply of yarn of correct weight, length and strength. It may also, to some extent, be due to the fact that the weavers' co-operative societies are in direct touch with the spinning mills through the provincial organisation. We do not, therefore, suggest that the malpractices mentioned above are rampant throughout the industry in India. Their extent can be judged from the following table based upon an analysis supplied to us by Mr. H. B. Shroff, Principal of the Government Central Textile Institute, Cawnpore and Textile Expert to the Government of the United Provinces :—

TABLE XXXIX.—*Tests carried out on sample yarns regarding short reeling, and wrong counts.*

Sample No.	Count.		Length.	
	Label.	Actual.	Actual.	Short.
1	5	1	8,400	33,600
2	10½	8	67,200	17,220
3	10½	9	75,600	8,820
4	2/20	2/20	84,620	*Nil.*
5	20½	17·2	165,420	23,940

TABLE XL.—*Statement of samples of yarn used in the United Provinces.*

Sample No.	Province or Country of Origin.	Description.		Test.		Strength.
		Count.	Weight in lbs.	Count.	Weight.	
1	Madras . . .	70s	5	74s	4 13¼	9·75
2	Do. . . .	70s	5	74s	4 13	9
3	Bombay . . .	40s	10	41s	9 8½	13·5
4	Do. . . .	40s	10	43s	9 10	10
5	Madras . . .	32s	10	35½s	9 13½	16
6	Rajputana . .	22½s	10	21s	9 13½	16
7	Bombay . . .	20½s	10	22s	9 7	18·25
8	U. P. . . .	20½s	10	21s	9 11	20·5
9	Do. . . .	20s	10	23½s	8 6	19
10	Bombay . . .	20s	10	25s	7 7	18
11	Do. . . .	20s	5	23½s	4 4	25·5
12	Madras . . .	20s	10	21s	9 9½	29·25
13	U. P. . . .	18½s	10	18s	9 9	28·5
14	Do. . . .	12½	10	10s	9 8	19
15	Do. . . .	5½	10	1·2s	10 0	62
16	Japan . . .	2/80s	10	2/82s	9 10	31
17	Do. . . .	60s	10	63½s	9 9	11·25
18	Do. . . .	60s	10	65s	9 9	9·5
19	Do. . . .	2/82s (mercerised).	5	2/92s	4 10½	26

83. *The Indian Merchandise Marks Act, as amended in 1941.*—We are of the opinion that yarn dealers who place orders for such yarn and the mills which execute them are both responsible for such sharp practices and both must be dealt with according to the law. We are told that the yarn dealers in their anxiety to compete in the market reduce the price of yarn by resorting to such practices. But is the case different with the mills which oblige the dealers in order to retain their custom in competition with other mills? As stated already, we do not wish to imply that all mills which produce yarn for sale are to be held as guilty, or that all yarn dealers necessarily cheat their customers. There are several mills whose names by themselves are enough to carry conviction as to the correctness of the goods sold. Similarly, there are many dealers and master-weavers who take a paternal interest in the welfare of the weavers and who would not stoop so low.

The Indian Merchandise Marks Act of 1889 has been recently amended and the present law prescribes that the weight and the counts of yarn must be conspicuously marked on the bundle. We have specially addressed ourselves to the question, how far the Act, as amended, has affected the situation. The Director of Industries, Bombay, is of the opinion that "strict enforcement of the provisions of these Acts (*i.e.*, the Merchandise Marks Act and the Bombay Weights and Measures Act) would be the best remedy for this evil". He is authorised by the Government of Bombay to institute prosecution "when evidence is forthcoming". In Madras, according to the reply of the Registrar of Co-operative Societies, "On account of the warning issued by Government and as a result of prosecution launched in select cases, these practices have almost disappeared". The other Provincial Governments, however, were not so hopeful. Mr. H. B. Shroff, Textile Expert to the U. P. Government, for example, states that there has been no stoppage of malpractices even after the passing of the Indian Merchandise Marks (Amendment) Act, 1941, and, in support of this, points out that samples of yarns procured from various centres in the United Provinces were tested by him during May, 1941 and the results of these tests were not encouraging. In this connection, we would like to state that absence of prosecutions is no proof of the non-existence of malpractices. Mr. Sankalchand G. Shah, of the Bombay Yarn Exchange, in an interview with us, stated that there was little change in the situation even after the Merchandise Marks (Amendment) Act. In his opinion, there were serious lacunae in the law in this regard, and there still was room for frauds of various types. The Punjab Government are of the opinion that "it is doubtful whether (even) more rigid enforcement of the provisions of the Merchandise Marks Act will meet the situation".

In our opinion, unless the correct number of knots in each bundle according to the standard packing is insisted upon, there is no hope of the present malpractices being removed. The old Act of 1889 did contain a provision laying down the number of knots or heads in each bundle. This clause has been left out in the new Act. In view of the malpractices detailed above, we think this clause should be re-instated in the Act. The yarn should be required to be packed in standard bundles by law. Besides, there is no arrangement at present to see that the requirements of the law are complied with. A strict supervision at the sources of manufacture, as well as at the subsequent stages, appears to be the only remedy for doing away with the sharp practices which are prevailing at present in the yarn trade.

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84. *Kinds of yarn used and sources of supply.*—In the handloom weaving the following kinds of yarn are used all over India :—

TABLE XLI.—*Kinds of yarn used and their sources.*

Kind of yarn.	Counts and derniers.	Source.
Cotton yarn	Single counts from 1s to 80s. Two fold counts 2/10s, 2/20s, 2/42s.	Mostly Indian Manufacture.
Do.	90s to 250s . . .	Mostly imported from United Kingdom.
Mercerised cotton yarn . .	2/42s, 2/64s, 2/84s, 2/120s, 2/140s.	From United Kingdom and Japan.
Artificial silk yarn and staple yarn	2/120s, Dernier, 2/150s, 1/120s, 1/150s.	From Japan.
Pure silk tussar and muga silk yarn.	13/16 and 21/22 dernier .	Mysore, Kashmir, Bengal, China and Japan.
Gold thread	....	India, Surat, France.
Spun silk	2/12s, 2/140s, 2/210s, 2/220s, 2/240s, 2/280s.	India and Japan.
Woollen yarn	Hand-spun and mill-spun .	India, Japan, Poland.
Cotton hand-spun yarn . .	....	India.

The handloom weaver uses practically every type of yarn from the coarsest yarn made from waste cotton to the finest silk, artificial silk, *tassar* and mercerised products. Some of these yarns, again are also consumed by the small-scale powerloom factories, which have a specialised field of their own. As regards the actual textile fibres in use, conditions differ from Province to Province and it is difficult to generalise but the main features of the yarn consumption may be noted here. Generally speaking, the village artisan uses cotton yarn of coarser counts in view of the demand for inferior types of cloth in local markets and *shandies*. On the other hand, important centres catering for distant markets and for the well-to-do consumers utilise finer yarns made from cotton and the costlier fibres. It is not true, however, to say that the handlooms hold a sort of 'monopoly' of coarser counts, or that there is any natural dichotomy under which handlooms may be relegated to the coarser counts and the mills and powerlooms can use finer counts only. In fact, the handlooms in many parts of the country are engaged in the weaving of the finest counts to a far greater extent than is commonly imagined.

In the Central Provinces and Berar, the handlooms use cotton yarn in single counts ranging from 2s to 80s and even up to 200s, and folded yarn, grey, bleached and mercerised, in counts between 2/20s and 2/120s. They also use a small quantity of hand-spun yarn, especially in the villages and under the aegis of the All-India Spinners' Association. Other yarns used are artificial silk in singles, 150 to 300 dernie and *neon* yarn (staple) of 2/100 to 2/150 derniers ; mulberry silk yarn, 13/15 22/25 derniers ; spun silk from

2/60s to 2/210s; *tassar* locally reeled; twisted 2 to 6 folds of between 2s and 10s; and singles between 1s to 10½s; woollen yarn, locally hand-spun; and gold thread, wound on cotton silk. For cotton yarn up to 80s, the source is mostly Indian mills, including the Empress Mills group of Nagpur, the South Indian mills and the Bombay mills; there is also some foreign yarn in these counts. Above 80s, mainly foreign yarn is used. Something like 62 per cent of the local yarn supply from mill production in the Province is used up by handlooms. As regards twisted yarn, below 2/42s the source is Indian; for 2/42s, partly Indian and partly foreign (Japanese); and for 2/64s, and above, only Japanese. Artificial silk yarn is wholly from Japan; mulberry silk yarn comes from Mysore, Kashmir and Malda, as also from Japan and China; spun silk from France, Italy and Japan; gold thread from Surat; *tassar* and woollen yarns are local.

In the Province of Bombay, in addition to the cotton yarns used in the Central Provinces and Berar, mercerised yarns of 2/42s, 2/64s, 2/84s, 2/140s and 2/120s mainly imported from Japan, art silk yarn of 2/20d, 2/150d, 150d and 120d and spun silk yarn of 2/120d, 2/140d, 2/160d and 2/280d are also used.

In Madras, the range of cotton yarns used on handlooms is much wider than that in most other Provinces except perhaps Bengal, from 6s to 200s being used. Apart from this, all the other kinds of yarns mentioned above are also used there, the principal centres for silk yarn consumption being those in the East Godavari District as also Anantapur, Chingleput, Tanjore and Coimbatore; and for art-silk yarn (of 120d to 250d) Kurnool, Madura, Ramnad, Tinnevelly and Guntur. Mercerised yarns of between 2/64s and 2/84s, is used in small quantities only, while the consumption of hand-spun yarn, is almost negligible. Cotton yarn is almost wholly supplied by the great spinning mills of South India, including the Madura and Coimbatore groups; silk yarn is imported from Japan and China mostly; artificial silk yarn is obtained from Japan and Italy; hand-made copper lace and silk gold thread come mostly from Surat.

In the United Provinces, the yarn consumed is similarly of different kinds, the sources of supply being as follows: Up to 10½s, mainly U. P. mills; single counts of cotton yarn, Bombay, Ahmedabad, Nagpur and South Indian mills; between 21s and 40s, Bombay, Ahmedabad, Sholapur and Madura mills; above 40s, South Indian mills and imported bleached and mercerised yarn; dyed yarn, from Kanauj in the United Provinces and artificial silk yarn (duplicate) and silk yarn, from Kashmir, Mysore, Bengal; also reeled silk yarn and spun silk yarn from abroad.

In Bihar, cotton yarn of coarser counts, between 6½s and 40s, is obtained from Indian mills, while finer yarns of 80s and 100s are imported either from Japan or Lancashire. Mercerised yarns of 2/42s, 2/64s and 2/84s and artificial silk yarn and staple yarn are obtained from Japan; spun silk yarns from Mysore and Japan; mulberry silk yarn from China, Malda and Mysore; and *tassar* silk and woollen yarns from local spinners.

In the Punjab, the handlooms use yarns of between 1s and 10s supplied by the United Provinces mills; the sources for yarns between 11s and 20s are the Punjab mills, and Gokak and Madura mills; for 31s and up to 40s Ahmedabad; for 2/10s and 2/40s Gokak and Madura; for higher counts,

Madura, Coimbatore and Ahmedabad mills ; for mercerised yarns of 2/42s, 2/64s and 2/84s Japan and the United Kingdom ; and hand-spun cotton yarn from local sources. Real silk yarn is obtained from the Punjab, Kashmir, Japan and China and artificial silk and staple yarn comes very largely from Japan and Italy. In the Punjab, the handloom weavers concentrate on coarser types of plain fabrics. One important branch of handloom weaving in the Punjab is the woollen section of the industry, which is responsible for a large amount of employment in the Province. Hand-spun woollen yarn is produced practically everywhere in the Punjab, while mill-made-woollen yarn is obtained mostly from abroad, a small quantity being purchased from the woollen mills in the Punjab, Bombay, Madras and the United Provinces.

In Bengal, cotton yarn of single counts between 24s and 40s is used in a large number of centres, as also twisted yarn of 2/20s, 2/40s and 2/64s ; but in certain centres of historical importance like Dacca and Santipur, yarns of very high counts are still used for the production of high-class fabrics. Similarly, silk, art silk and mercerised yarns, gold threads and artificial silk yarn are used for borders and for other effects in large quantities. The supplies of cotton yarn are obtained from Madras, United Provinces, Bombay and Bengal mills, while yarns of higher counts are imported from Japan and Lancashire. Silk yarns, hand-reeled of 30/50 derniers, are from Murshidabad, Birbhum, Bankura, Malda and Assam, while 30/40 derniers, machine-reeled come from Japan, Italy and China. Birbhum, Midnapore, Assam and also Japan are the sources for *tassar* and *muga* silk yarn ; Japan, Italy and Mysore for spun silk yarn ; and Japan only for artificial silk yarns. Woollen yarns are obtained from Tibet, Kashmir, and Japan and Poland.

In the States, the position is much the same as in the Provinces with certain special features here and there.

In Hyderabad, the range of cotton yarn consumption is between 3s to 120s, 75 per cent of the yarn consumed by handloom weavers being of 3s, 6s, 10s, 16s, 18s, 20s, 24s, 28s and 30s. These and medium counts of yarn are obtained locally and from British India. Mercerised yarn is also used to a large extent ; and spun silk and artificial silk are imported from foreign countries. In addition to Chinese silk yarn, a lot of silk yarn is imported from Calcutta and Bangalore.

In the Mysore State, cotton yarns of mostly 20s, 24s, 30s, and 40s are used. The consumption of counts below 14s and above 80s being small, while silk, artificial silk, and woollen yarns are also very largely consumed. Cotton yarns are obtained from Indian mills in South India, while artificial silk yarns of 150d to 300d imported from Japan and Italy are being used in large quantities, in recent years. In the case of silk, China and Kashmir silks are mixed up with local silks with a view to cheapening the production. Mercerised yarn imported from Japan in 2/64s and gold lace from Surat are also used for special fabrics.

In the Travancore State, the most popular counts are 20s, 40s and 60s, both grey and coloured, which are largely obtained from the South Indian mills. Artificial silk yarn is used in small quantities for effective borders. In the Deccan States cotton yarns ranging from 20s to 60s and 2/64s and 2/84s are used, while art silk and silk yarns are also used for borders, weft, and garment ends. In Baroda, the predominant counts are below

20s for cotton yarn which are obtained from Indian mills, while art silk, silk and mercerised yarns are also in use. Indore uses all counts from 10s to 100s singles, and 2/84s and 2/120s, bleached and mercerised cotton.

85. *Quantities of imported, Indian mill-made, and hand-spun yarns used.*—The sources of the available supply of cotton yarn may be conveniently analysed under the three heads of (i) Indian mill yarn, (ii) imported foreign yarn, and (iii) hand-spun yarn. In 1932, the Tariff Board estimated the proportions of hand-spun, mill-spun and imported yarns consumed by handlooms as under :—

TABLE XLII.

—	Million lbs.	Percentage.
Hand-spun	24	6·6
Mill-spun	311	85·2
Imported	30	8·2
TOTAL	365	100·0

They assumed that practically all imported yarn above 30s was used up by the handlooms. It was estimated by Mr. Hardy in his *Report* (p. 36) that for Bombay mills in 1928 the proportion of yarn sold for consumption outside the mills was about 30 per cent.

In Table XLIII we have brought together figures supplied by Provincial and State Governments regarding the annual consumption of cotton yarn by handlooms in their areas. Detailed figures for Baroda, Cochin and Mysore are not available, while the Indore figures are negligible.

TABLE XLIII.—*Annual consumption of cotton yarn by handlooms (in million lbs.).*

Province or State.	Indian mill yarn.	Imported mill yarn.	Hand-spun yarn.	Total.
Assam	5·70	·54	·48	6·72
Bengal	25·06	4·41	·17	29·64
Bihar	18·20	·25	·50	18·95
Bombay	39·83	3·83	3·09	46·75
C. P. and Berar	21·35	·29	·12	21·76
Madras	75·48	5·83	·82*	82·13
Orissa	14·43	·24	·06	14·73
Punjab	12·31	1·19	35·38	48·88
United Provinces	43·05	1·65	6·51	51·21
Baroda	(a)	(a)	(b)	3·01
Cochin	(a)	(a)	(a)	1·45
Gwalior	·82	(b)	·05	·87
Hyderabad	9·50	7·93	·30	17·73
Indore	(b)	(b)	(b)	
Jammu and Kashmir	1·55	·04	·74	2·33
Kolhapur and the Deccan States	·89	·61	1·17	2·67
Mysore	(a)	(a)	·04	4·50
Travancore	6·60	·20	·05	6·85
TOTAL	274·77	27·01	49·48	350·19

*Assuming hand-spun yarn to be 1 per cent of total (on the authority of D. Narayan Rao ; *cf.* his Report on Madras Cottage Industries).

(a) Not known.

(b) Negligible.

In Table XLIII (*a*) below, we omit the states of Baroda, Cochin, Mysore and Indore and total up figures for the remaining Provinces and States, making the legitimate assumption that the average proportion for these latter would largely determine the all-India ratios in view of the large weightage attached to them in the all-India figures.

TABLE XLIII (*a*).

—	Million lbs.	Percentage.
Hand-spun	49·48	14·1
Indian mill-spun	274·77	78·2
Imported mill-spun	27·01	7·7
TOTAL	351·26	100·0

Comparing the above percentages with those obtained by the Tariff Board, we notice that for hand-spun yarn, our percentage estimate is considerably higher, while for imported yarn it is about the same, and that correspondingly the percentage going to Indian mill yarn is somewhat lower. This is due to the fact that the Tariff Board's estimate of hand-spun yarn is considerably lower than our figures suggest.

86. *Indian mill-spun yarn.*—The tremendous growth which has taken place in the spinning section of the Indian mill industry is shown in Table XLIV. The principal counts of yarn produced and woven in Indian mills are between 16s and 36s. The consumption of yarn of finer counts by mills is still very small. Mr. Hardy estimated in his Report that 90 per cent of the production of Indian mills was of counts below 30s, while it was less than 4 per cent for counts above 40s. Since Mr. Hardy reported, however, the mills are turning their attention to higher counts to an increasing extent, as is apparent from the trend of the figures for counts of yarn produced by them.

TABLE XLIV.—*Production of cotton yarn in Indian mills classified according to counts.*

Counts.	1917-18.	1922-23.	1927-28.	1932-33.	(in million lbs.) 1937-38.	1939-40.
1—10s	100·5	103·0	106·0	115·2	114·2	123·1
11—20s	346·0	375·6	388·8	484·2	494·9	545·5
21—30s	183·7	209·0	263·1	297·5	302·9	310·8
31—40s	24·4	15·9	33·8	77·2	152·5	157·1
Above 40s	5·8	2·2	11·1	36·6	85·1	91·8
Waste	0·2	0·2	6·2	5·7	11·2	15·5
TOTAL	660·6	705·8	808·9	1,016·4	1,160·7	1,233·7

87. *Foreign yarn.*—In Table XLV below are shown the total imports of yarn since 1926-27 and the proportion of these which came from the United Kingdom and from Japan in each year :—

TABLE XLV.—*Imports of cotton twist and yarn.*

(Quantity in million lbs.)

Year.	Total.	United Kingdom.		Japan.	
			Per cent.		Per cent.
1926-27 . . .	49·42	20·11	41	26·62	54
1927-28 . . .	52·34	20·56	59	16·97	32
1928-29 . . .	43·77	23·09	53	7·63	17
1929-30 . . .	43·88	20·11	46	10·87	25
1930-31 . . .	29·14	10·31	35	6·89	24
1931-32 . . .	31·58	11·91	38	6·21	20
1932-33 . . .	45·10	13·36	30	18·15	40
1933-34 . . .	32·06	9·95	31	11·68	36
1934-35 . . .	34·01	9·78	29	11·34	33
1935-36 . . .	44·50	9·38	22	20·00	47
1936-37 . . .	28·50	7·26	27	14·91	55
1937-38 . . .	21·99	6·63	30	14·64	67
1938-39 . . .	36·46	4·68	13	21·17	58
1939-40 . . .	41·13	2·83	7	27·16	66

It will be seen from the above figures that in spite of the protective duties on yarn, imports had not fallen too rapidly. The explanation appears to be that although imports of grey and coloured yarns of lower and medium counts went on decreasing during the period of protection, twists, mercerised yarn and yarns of higher counts increased in volume. Almost all these imports were meant for the handlooms and small-scale powerloom factories. It is, however, clear that the consumption of foreign yarn by handlooms has not increased but diminished on the whole in recent years. The average annual imports of foreign yarn during the quinquennium preceding 1926-27 were of the order of 53½ million lbs.; in the pre-war year of 1938-39, they stood at nearly 36½ million lbs. In 1920-21, according to the estimate of Mr. (now Sir) Thomas Ainscough, out of a total of 47 million lbs., nearly 44 million lbs. were used by the handlooms. In 1932, the Tariff Board estimated, that out of 31 million lbs. of yarn imported, 30 million lbs. was consumed by handlooms, basing their estimate on the assumption that the hand-weaver used no imported yarns of counts below 30s. The recent emergence of the small-scale powerloom factory, whose order of magnitude is not accounted for in official statistics, no doubt to some extent qualifies the assumption of the Tariff Board, in that the powerloom factory, along with the hosiery industry, shares the consumption of foreign yarn with the handloom. Taking all these facts into consideration, the conclusion is strengthened that the handloom weaver's consumption of foreign yarn has been diminishing. The gap has no doubt been filled up by the supply of yarns of higher counts by the expanding spinning industry of India, which is assisted by protection. But the one important consequence of protection, *viz.*, replacement of foreign yarn especially grey singles yarn, is brought out by the import figures in recent years as can be clearly seen from Table XLVI below :—

TABLE XLVI.—*Mill production and imports of cotton yarn according to counts.*

(in million lbs.)

	1913-14.		1925-26.		1930-31.		1935-36.		1939-40.	
	Imp.	Prod.	Imp.	Prod.	Imp.	Prod.	Imp.	Prod.	Imp.	Prod.
Counts.										
1—20 . . .	1·3	492·7	4·8	444·7	·5	513·7	·2	591·0	·8	668·5
21—25 . . .	·9	124·0	·5	142·8	·3	166·3	·2	161·6	·1	173·1
26—30 . . .	3·7	43·0	·6	71·0	·2	93·3	1·2	126·0	·1	137·7
31—40 . . .	23·7	19·7	26·3	19·7	14·8	60·7	13·5	112·0	3·2	157·1
Above 40 . .	7·9	2·7	6·7	5·8	4·3	27·3	8·7	58·5	7·3	81·8
Grey and coloured (twofold) double.	..	..	6·2	..	9·2	..	20·7	..	29·5	..
Waste, etc. . .	6·8	·7	6·6	2·3	..	5·8	..	6·1	..	15·5
TOTAL .	44·2	682·8	44·6	686·3	29·1	867·3	44·6	1,055·2	41·1	1,233·7

88. *Imports of artificial silk yarn.*—A growing competitor for the Indian cotton yarns, so far as the consumption of the handloom industry is concerned, is artificial silk yarn. Its imports have increased by leaps and bounds in recent years and have complicated the task of those who would develop the Indian spinning mill industry with the assistance of protection. Artificial silk yarn is very much favoured by the handloom weaver throughout India and particularly in Madras, Mysore, Bengal, Bombay and the Punjab as a decorating material for borders of saris and other ornamental effects. The rapid growth and importance of the trade in artificial silk yarn can be seen from the following table ;—

TABLE XLVII.—*The quantity of artificial silk yarn imported into British India by sea from foreign countries during 1926-40.*

(in thousands of lbs.)

Year.	From United Kingdom.	From Japan.	From other countries.	Total.
1926-27	655	(a)	5,121	5,776
1927-28	2,277	(a)	5,232	7,509
1928-29	1,686	(a)	5,982	7,668
1929-30	1,427	(a)	5,926	7,353
1930-31	1,006	19	6,095	7,120
1931-32	999	436	6,527	7,962
1932-33	1,656	1,799	7,547	11,002
1933-34	1,589	2,542	5,677	9,808
1934-35	862	8,897	6,857	16,616
1935-36	522	9,957	4,432	14,911
1936-37	242	15,130	2,257	17,629
1937-38	497	28,238	2,854	31,589
1938-39	131	6,509	10,608	17,248
1939-40	43	21,876	8,876	30,795

(a) Negligible.

It must not be understood that the whole of artificial silk yarn imported into the country is consumed by the handloom industry. On the contrary, it appears that the major part of it is absorbed in the mill and powerloom sections. Mr. Sankalchand G. Shah of Bombay estimates that 75 per cent of the imported artificial silk yarn is used by the handlooms, while 25 per cent only is used by the mills. Mr. Nagindas F. Chinai, another merchant of Bombay, on the other hand, informed us that the relative position is just the reverse of this, *i.e.*, the handlooms use 25 per cent and mills 75 per cent. Mr. I. P. Parekh, Manager of the Sri Sakti Mills, has favoured us with a detailed estimate in this connection. According to him, out of the 26 million lbs. of artificial silk yarn imported into India in 1940-41, 18 million lbs. was consumed by 6,000 powerlooms covered by mills belonging to the Silk Yarn Association. Mr. Parekh arrives at this figure by multiplying 6,000 by 3,000 lbs., which is the annual consumption per powerloom, the average monthly consumption being 1½ cases, or roughly 250 lbs. Apart from this, artificial silk yarn is also used in certain mills for producing mixtures. Of the remaining 8 million lbs. a third is estimated as going into this consumption. The remaining two-thirds, or 5·2 million lbs. according to Mr. Parekh, must be available to the handlooms. This amounts to about 20 per cent of the total imports for 1940-41.

A lot of artificial silk yarn is consumed in the manufacture of hosiery goods, such as socks and stockings, knitted ties, scarves, undervests, etc. Moreover, quite a considerable quantity of braids, cords, ribbons and shoe laces are manufactured purely of artificial silk now-a-days. A very large amount of artificial silk yarn is used for embroidery purposes. No statistics are available for the quantities of artificial silk so used. In the absence of these statistics, therefore, it is difficult to estimate the approximate quantity of artificial silk yarn consumed by the handloom weavers. But the following table has been compiled from the figures supplied to us by different Provinces and States.

TABLE XLVIII.—*Artificial silk yarn consumed by the handlooms.*

	(In lbs.)
Orissa	12,000
Bihar	588,700
Punjab	3,750,000
United Provinces	367,000
Central Provinces	120,000
Madras	1,857,794
Hyderabad	391,000
Jammu and Kashmir	16,810
Baroda	48,440
Mysore	1,500,000
Ichalkaranji	119,882
TOTAL	8,771,626

From the table it would appear that 8·77 million lbs. have been consumed by some of the Provinces and States and if we add another 10 per cent for the remaining Provinces and States which have not supplied figures, the total

estimated quantity of artificial silk yarn consumed all over in India comes to 9·65 million lbs. The total imports of artificial silk yarn in 1939-40 amounted to 30·79 million lbs. The estimated quantity consumed *viz.*, 9·65 million lbs. forms only 31·94 per cent. This comes near to the estimate given by Mr. Chinai and Mr. Parekh.

The handloom industry consumes a considerable quantity of mercerised cotton yarn and spun silk yarn. But as these are also consumed by the hosiery, factories and powerlooms, we are not in a position to give any accurate estimate in that connection.

89. *Hand-spun yarn.*—No accurate figures are available for the production of hand-spun yarn. The only thing that can be said with certainty is that hand-spun yarn, which used once to be the mainstay of the hand-weaving industry, was long ago relegated to an insignificant position in the textile industry of the country. Some indication of this has already been given in earlier Chapters. Owing to the influence of the *khaddar* and hand-spinning movement sponsored by Mahatma Gandhi, lately there has been some resuscitation of hand-spinning especially under the aegis of the All-India Spinners' Association. It must be said that the movement does not find much favour with the masses in India. There has been some improvement in the supply of hand-spun yarn owing to the impetus provided by the Congress and the All-India Spinners' Association. Still owing to the steady incursion of mill yarn and cloth in the remotest villages in the interior of the country, hand-spinning has on the whole suffered a further decline in recent years. In the course of our tours, practically everywhere we found the handloom weaver averse to using hand-spun yarn. The reasons given were various :- Hand-spun yarn was uneven ; it lacked in tensile strength ; it was unsuitable for the better class of fabrics ; its cost was much higher than that of mill-spun yarn. The Tariff Board in their Report (1932) estimated the production of hand-spun yarn at 24 million lbs. on the basis of 25 lbs. as the maximum production per spinner in a year. This maximum is not indeed beyond the capacity of the average spinner, but the question is whether this so-called maximum is reached by spinners as an average over a year. Thus, for example, from the Report of the All-India Spinners' Association for the year 1939, it appears that the 224,421 spinners affiliated to the Association produced a total quantity of 11,123,850 sq. yards of cloth. Mr. A. P. Choudhuri, Secretary of the Bengal and Assam Branches of the Association, states that the average Bengal figure for cloth produced under the Association's direction is 3 sq. yards to the lb. which gives an equivalent of 3,707,950 lbs. for the quantity of cloth mentioned above. The Secretary of the All-India Spinners' Association informs us that the total weight of hand-woven cloth produced under the Association's auspices in 1940 was 3,082,693 lbs. This leads us to the conclusion that the annual average production of the Association spinners is between 13·7 and 16·5 lbs. per head, assuming that the yarn spun by them is wholly utilised within the Association itself. Further, the spinners working under the Association may be assumed to be far more enthusiastic and regular than the spinners outside the purview of the Association. We are, therefore, inclined to the view that the average should be somewhat lower. We think 12 lbs. per spinner would be a reliable approximation to the true figue. Assuming that 5 million spinning wheels are actually in use and that the number of spinners is about the same as the number of

wheels, the total production will amount to 60 million lbs. As explained in Appendix XXVI, moreover, there are large numbers of *taklis* being plied by countless wandering beggars and others, for which an addition of 10 per cent may be made to this, bringing the total production of hand-spun yarn to 66 million lbs.

At our request the Secretary of the Association has made a fresh estimate according to which the total production of hand-spun yarn under the Association is given as 3,082,693 lbs., and he also informs us that the Association yarn "might be about one-third of the total hand-spun yarn produced in India". This means that the total for India, according to him, must be round about 9·2 million lbs. This estimate is also supported by Mr. Choudhury, Secretary of the Bengal and Assam branches of the Association. In our opinion, 9·2 million lbs. is too low an estimate of the all-India figure. In Table XLIII we have quoted figures for the annual consumption of different kinds of cotton yarn by handlooms in the principal Provinces and States. Referring to the column containing the figures for hand-spun yarn in that table, it will appear that the total consumption of hand-spun yarn in Provinces and States from which figures were received, amounted to 49·48 million lbs. If we make an allowance of a further 10 per cent for the remaining Provinces and States such as Sind, Delhi, N.-W. F. Province, Ajmer-Merwara, and some of the States, the total will come to 54·4 million lbs. We are inclined to the view that this is a more accurate figure than the previous estimate of 24 million lbs. of the Tariff Board, in view of the fact that the Punjab alone produces over 35 million lbs. of hand-spun yarn. In Table XLIX below, we bring together the various estimates, including our own, for production (as distinct from consumption) of hand-spun yarn. It is obvious, that according to our estimates, while the production is about 66 million lbs. the consumption is about 54·4 million lbs. Reference may be made of Appendix XXVI for further details.

TABLE XLIX.

	Million lbs.
A. Pearse	2,400
M. P. Gandhi	60 to 125
Tariff Board (1932)	24
A. I. S. A.	9·2
Our estimates	66

90. *Counts of yarn used.*—While the handloom utilises practically the whole range of the available counts in the production of a variety of cloths, the essential question to be discussed is the peak range of the counts used by handloom weavers. The Tariff Board, in their 1932 Report, stated that "The bulk of handloom production consists of cloth of counts 20s and below". This conclusion was based by them upon figures supplied by one Province only, *viz.*, the Central Provinces and Berar. We reproduce those figures and also recent figures supplied by the Director of Industries of the same Province for comparison :—

TABLE L.—*Consumption of cotton yarn by handlooms according to counts in the Central Provinces in 1931 and 1941.*

Counts.	Percentage of total consumption (1931).	Counts.	Percentage of total consumption (1941).
10s	15·1	1s to 10s	11·8
12s	6·0	11s to 20s	59·7
16s	49·2	21s to 30s	15·9
20s	23·0	31s to 40s	8·2
32s	4·3	Above 40s	4·4
40s	2·2	..	..
Above 40s	0·2	..	..
TOTAL	100·0	..	100·0

From the Table L, it appears that during the last ten years there has taken place a steady rise in the counts of yarn utilised by the handlooms in the Central Provinces and Berar and that the peak range lies between 11s and 30s rather than between 1s to 20s. Moreover, it will be clear from Table LI that the Central Provinces and Berar, next to the United Provinces, is an area using the largest percentage of lower counts ; while some of the other Provinces and States, like Madras, Bengal, Bombay, Assam and Hyderabad, which from the point of view of the weightage of an all-India calculation are more significant in this connection. The figures given in Table LI below include hand-spun yarn as well as mill-spun yarn.

TABLE LI.—*Annual consumption (according to counts) of cotton yarn by handlooms.*

Province or State.	Counts of yarn.					
	1—10.	11—20.	21—30.	31—40.	Above 40.	Total.
Assam	0·42 (6·25%)	2·20 (32·74%)	3·0 (44·64%)	0·75 (11·16%)	0·35 (5·21%)	6·72 (1·87%)
Bengal	0·44 (1·5%)	2·52 (8·5%)	14·82 (50%)	5·93 (20%)	5·93 (20%)	29·64 (8·25%)
Bihar	6·80 (35·88%)	10·75 (56·73%)	0·89 (4·70%)	0·26 (1·37%)	0·25 (1·32%)	18·95 (5·28%)
Bombay	2·81 (6%)	4·67 (10%)	14·96 (32%)	12·62 (27%)	11·69 (25%)	46·75 (13·02%)
C. P. and Berar	2·58 (11·83%)	13·00 (59·71%)	3·46 (15·87%)	1·79 (8·2%)	0·93 (4·39%)	21·76 (6·06%)

TABLE LI—*contd.*

Province or State	Counts of yarn.					
	1—10.	11—20.	21—30.	31—40.	Above 40.	Total.
Madras . . .	6·13 (7·44%)	28·86 (35·15%)	13·99 (17·04%)	17·58 (21·41%)	15·57 (18·96%)	82·13 (22·86%)
Orissa . . .	0·47 (3·19%)	5·79 (39·31%)	4·33 (29·35%)	3·03 (20·55%)	1·11 (7·60%)	14·73 (4·10%)
Punjab (a) . .	31·25 (63·93%)	12·81 (26·21%)	1·88 (3·85%)	0·94 (1·92%)	2·00 (4·09%)	48·88 (13·60%)
U. P. . . .	14·79 (28·89%)	28·31 (55·29%)	4·31 (8·40%)	2·15 (4·20%)	1·65 (3·22%)	51·21 (14·25%)
Baroda . . .	2·42 (80·46%)	0·28 (9·45%)	0·19 (6·40%)	0·11 (3·53%)	0·01 (0·16%)	3·01 (0·84%)
Cochin . . .	(b)	0·50 (34·48%)	0·50 (34·48%)	0·35 (24·14%)	0·10 (6·9%)	1·45 (0·4%)
Hyderabad . .	3·16 (17·80%)	8·01 (45·11%)	2·74 (15·48%)	2·35 (13·25%)	1·47 (8·36%)	17·73 (4·93%)
Kolhapur and the Deccan States.	0·01 (0·37%)	0·06 (2·26%)	1·10 (41·20%)	0·35 (13·10%)	1·15 (42·07%)	2·67 (0·74%)
Jammu and Kashmir	(b)	0·28 (12·01%)	1·81 (77·68%)	0·22 (9·45%)	0·02 (0·86%)	2·33 (0·65%)
Mysore (c) . .	·09 (2%)	·09 (2%)	2·16 (48%)	2·16 (48%)	.. ..	4·50 (1·25%)
Travancore . .	0·34 (5%)	5·49 (80%)	0·34 (5%)	0·34 (5%)	0·34 (5%)	6·85 (1·90%)
TOTAL .	71·71 (19·95%)	123·62 (34·43%)	70·48 (19·62%)	50·93 (14·16%)	42·57 (11·84%)	359·32 ..

(a) It is assumed that all imported mill yarn is above 40s counts.
(b) Negligible.
(c) It is assumed that consumption of yarn is equally distributed between 1—10s and 11—20s and between 20—30s and 30—40s.

In Table LII below, we have made an attempt to analyse according to counts the consumption of cotton yarn, including mill-spun, hand-spun and imported yarn. In doing so, we have assumed that the hand-spun yarn (49·48 million lbs.) consumed by handlooms in the Provinces and States in Table LI is equally distributed between the first two groups of counts, *viz.*, 1—10 and 11—20. The Punjab, which produces a major proportion of the hand-spun yarn, gives a very large quantity in the counts 1—10; thus, half and half seems to be a correct distribution between these two groups, for India as a whole. In Table LI, the total for cotton yarn consumed includes mill-spun hand-spun and imported yarns. However, of the imported yarn a large quantity consists of two-folds and cannot come under the classification adopted. The imported yarn, for which the average (33·18 million lbs.) of the period 1937-40 is taken in Table LII, goes, as already stated,

almost entirely into handloom consumption. After deducting 22·65 million lbs. for two-folds, the balance of 10·53 million lbs. has been assumed to be distributed amongst the five groups of counts in the table, in the same proportion as the Indian mill yarn. In the final column in the table are shown amounts of Indian mill yarn, arrived at after deducting from the total of 359·32 million lbs., hand-spun yarn (49·48) million lbs. under counts 1—10 and 11—20 and imported yarn (10·53 million lbs.) under all the groups of counts.

TABLE LII.—*Consumption of different types of cotton yarn by the handloom industry according to counts.*

(in million lbs.)

Counts.	Total consumption of cotton yarn. (Excluding two-folds.)	Consumption of hand-spun yarn.	Consumption of imported yarn.	Consumption of Indian mill yarn.
1—10s	71·71	24·74	·19	46·79
11—20s	123·63	24·74	·38	98·50
21—30s	70·48	..	·32	70·16
31—40s	50·93	..	3·91	47·02
Above 40s	42·57	..	5·73	36·84
Two-folds, etc.	..	..	22·65	..
TOTAL	359·32	49·48	33·18	299·31

The next step is to take the distribution by counts of the cotton yarn produced in India, and to subtract therefrom in the case of each group of counts, the corresponding quantities of Indian mill yarn used (*a*) by handlooms, (*b*) by powerlooms, hosiery, and other miscellaneous industries, as shown in Appendix XVII and (*c*) for exports. In the case of (*b*) powerlooms, hosiery, and miscellaneous and of (*c*) exports, we assume that the percentage distribution is the same as in that of the all-India figures for the production of mill-spun yarn. Accordingly, we arrive at the following results :—

TABLE LIII.—*Consumption of Indian mill yarn for different purposes classified according to counts (1937-40).*

(in million lbs.)

Counts.	Production of mill yarn in India. (Average.)	Consumption of Indian mill yarn by handlooms. (Average.)	Exports (Average.)	Powerlooms Hosiery, miscellaneous, etc. (Average.)	Balance consumed by mills.
1—10s	128·5	46·8	3·9	5·7	72·12
11—20s	581·4	98·5	17·4	25·6	439·94
21—30s	321·5	70·2	9·7	14·3	227·3
31—40s	161·4	47·0	4·8	7·1	102·5
Above 40s	87·3	36·8	2·6	3·8	44·1
TOTAL	1,280·1	299·3	38·3	56·5	886·0

We are now in a position to compare the respective distribution by counts of the consumption of cotton yarn by the handloom and mill industries. In the case of handlooms the percentage distribution is the one indicated in Table LIV while in that of mills, it is calculated on the basis of figures in the preceding tables.

TABLE LIV.—*Percentage distribution by counts of the consumption of cotton yarn by handlooms and mills.*

Counts.	Mills.	Handlooms.
	(percentage)	(percentage)
1—10s	8·1	20·0
11—20s	49·6	34·4
21—30s	25·7	19·6
31—40s	11·6	14·2
Above 40s	5·0	11·8
TOTAL .	100·0	100·0

The above table summarises the results of the foregoing tables. It will be seen that the percentage distribution of the mills steeply rises in the range 11—30s, while in the case of handlooms, it is more evenly spread out. Thus, both in very low counts and in high counts, the proportion of handloom consumption of yarn is higher than that of mill consumption of yarn. Another interesting point which arises from the table is that below 20s the mills produce 57·7 per cent of their output, while the handlooms produce somewhat less, *viz.*, 54·4 per cent of their output. Thus, although the Tariff Board's Assertion, in their 1932 Report (p. 171), that "the bulk of the handloom production consists of cloth of counts 20s and below", is no doubt correct, such a statement would be even more true of the mill industry.

91. *Form in which yarn is supplied.*—The yarn is generally supplied to the weavers in bundles and knots and this is stated to be the most convenient mode of supplying it. Hosiery factories, on the other hand, prefer yarn on cones and cheeses even at additional cost. The bulk of the yarn used by handloom weavers is sized either in hank form or after the warp has been laid out. Similarly, yarn is dyed before using and, therefore, the hank form is found more convenient. Besides, the yarn in the form of bundles and hanks is cheaper and more convenient to handle. Ready-made warp will perhaps save a considerable amount of preparatory labour, but this instead of being an advantage, under present circumstances, is likely to prove exactly the opposite. The preparatory processes, such as winding, warping and sizing provide employment to the assistants and the family of the weaver, and therefore, to the extent that ready-made warp is more costly than bundled yarn, it may be said that the weaver and his subsidiary workers earn a smaller wage.

92. *Dyeing and bleaching of yarn.*—In most parts of India, the handloom weaver uses dyed yarn, but while in the South, generally speaking, the percentage of dyed yarn to total yarn used is high, in some of the Provinces of the North, grey yarns are used. For instance, in Madras, the percentage is 60 per cent; in Bombay 90 per cent; in Bengal 80 per cent; in the Punjab 10 per cent; in Bihar, less than 5 per cent; but in the United Provinces 70 per cent. Very little bleached yarn is used by the weavers. They ordinarily resort to bleach the woven goods in the piece. This is generally done by the dhobies.

As in the case of sale of yarn, the arrangements for dyeing yarn also can be various. In some cases, yarn is purchased grey by merchants who have their own dyeing houses and who sell the dyed yarn to weavers or to other yarn dealers, both local as well as mofussil, for retailing. Yarn merchants sometimes also send the grey yarn for dyeing to private dyers who do it for a fixed charge for them. The weavers or *Sowcar*-weavers themselves sometimes dye yarn which they have purchased in a grey condition in their own houses, or, the weavers or *Sowcar*-weavers may send the grey yarn to dyers to be dyed at small charges. The mills also supply certain types of dyed yarn. There are dyeing factories in some important weaving centres like Salem, Chirala, Madura, Calcutta, Bankura, Petlad, Sholapur, Cawnpore, Lucknow, Fyzabad, Amritsar, Ludhiana and Multan. There are also co-operative societies and Government Institutes in some of the Provinces and States which dye yarn for the weavers at moderate charges.

The cost of dyeing the yarn is an important item in the expenses of weaving. Of course this is lowest if the weaver himself does the dyeing, while the charges are higher in the case of private dyers and still higher in that of mills. It is difficult to speak precisely in this connection, because the charges made depend upon the type of colour and process used as also upon the weight and counts of yarn.

CHAPTER VI.

Handloom Fabrics.

93. *Where the handloom excels.*—Before dealing with the different classes of cloth produced by the handloom industry, it may be useful to state briefly the strong and weak points of handloom cloth. In general, it may be said that the handloom excels in the coloured styles of cloth. This is chiefly due to two facts, *viz.*, that warp of a short length can be prepared most economically by hand process and that a number of colours in the weft can be easily introduced reducing wastage to a minimum. The limited market of such cloths also makes their production uneconomical for the powerlooms. The handloom's advantage is specially noted in the following types of production: (1) Cloth made from extremely fine material, *e.g.*, yarn of counts above 120s, which being delicate is woven more safely on the handloom owing to comparative lightness of the jerks; (2) cloth interwoven with gold and silver thread, the polish of which would be taken out by the extremely frictional action of the healds in the powerloom; (3) cloth with multi-coloured designs in which the weft is to be changed very frequently; (4) cloth with embellishment in the border and headings, or with entire effects with delicate designs of various colours; such work calls for individual skill and must be carried out slowly; (5) short pieces of cloth of unique design to meet individual tastes, which cannot be economical for the mills; (6) cloth of a small width with designs in the headings, *e.g.*, *pagris*; and (7) rough cloth of very low counts, such as *durris*, *niwars*, webbing, etc., in whose, case the tensile strength of the yarn is too low for the powerloom.

Hence the continued monopoly enjoyed by the handloom in the manufacture of checked and striped fabrics, coloured fabrics of numerous designs and cloth in which gold and silver lace is inwrought. Solid-bordered saris and *khans*; saris with solid headings (*top-padar*); *paithanis* with flowers in the body and headings; silk *shalus*; *jamdani* saris of Dacca, Tangail and Rajbalhat; Madura saris; Kumbha and Bandha saris; and Purdahs of Orissa; the *purdahs* and curtains with conventional animal designs, made at Sambalpur; *Himrus*, *Mushrus*, *Kinkhabs* (brocades), *susis*, fine *pagri* cloth, *lungis*, *sarongs* and Madras handkerchiefs,—these are some of the specialities in which the handloom has steadily maintained a monopoly. Although the mills have produced substitutes in these lines, they cannot carry on direct competition with the handloom. Nor is this confined to wearing apparel. Similar advantages are enjoyed by the handloom in the case of *durris*, furnishing fabrics, etc. *Khes* cloth, a speciality of the Punjab and Sind, is a handloom monopoly, because the necessity of using multiple-box looms for giving more colours in the weft involves too heavy a cost for the powerloom, and also because the insertion of multi-coloured weft for the heading at comparatively short regular intervals is difficult for the mills without interfering with the normal speed of the looms.

Thus it is true that the handloom can beat the mills in a variety of fancy goods, but the importance of this can easily be exaggerated. The taste for such distinctive fabrics is confined to a small class; the great majority of people have neither the taste for using nor the means for purchasing such

fabrics, and they are satisfied with the cheaper mill-made cloths which will more or less meet the same purpose. The demand for such goods is therefore bound to be limited, and all the special advantages of the handloom enumerated above can give little consolation to the average hand-weaver. He confines himself to the production of ordinary cloth, which necessarily comes into competition, more or less directly, with cheaper mill-made goods. The great bulk of the fabrics to be considered in this Chapter is of this latter category.

94. *Where the handloom is inferior.*—We have also to recognise that the handloom cloth suffers from equally pronounced defects. The chief of them are: (i) lack of uniformity in texture, (ii) inexactness regarding dimensions, and (iii) lack of finish, etc. Lack of uniformity is perhaps the most glaring of these defects. We have come across this defect even in centres confining themselves to a narrow range of counts. In Madhobdi (Bengal), where saris of 32s to 40s counts are woven, the price of two saris of the same counts and design may vary from Re. 1 to Rs. 1-4-0, the reason being that some of the saris are of a close texture, while others are not. Even in one and the same sari, the texture towards the end of the cloth may be different from that in the middle. At Gadag and Bettigeri (Bombay-Karnatak) we came across saris made of 20s counts, wherein yarn of 40s had been used for a few inches on the top. In some places in Madras (*e.g.*, Oondiputhur) and Bengal (*e.g.*, Santipur), yarns of 70s and 80s counts have been mixed together in the warp. These practices are resorted to for economising on cost, but the real consequence is a loss of confidence in the handloom cloth among those who still stick to it at some cost. It is, therefore, essential that this defect should be remedied by resorting to standardization in respect of quality of fabric, and reed and picks per inch in each range of counts. The Governments in India, especially those of United Provinces and Bihar, have made a beginning in this important line of reform.

Standardization involves also uniformity in regard to weight and dimensions. But in most hand-weaving centres, little care is bestowed on this important matter. At one place we tested a dozen saris supposed to be nine yards in length, and found that the actual length varied from 8¼ to 9⅛ yards. Similar variations obtain in regard to width also. All this is due largely to the ignorance of the average weaver in regard to the actual quantity of yarn bought in knots of 10 or 20 hanks. He finds after a certain time that the dimensions are not up to the proper standard. The shrinkage allowance and the wastage of yarn have no place in his calculations. In certain Madras centres, a weaver buys on the basis of a *kal*, *i.e.*, a length of 70 yards of 240 ends, and he calculates the number of threads on the basis of *punjams*, *i.e.*, 120 ends. Each *kal*, therefore, would be 2 *punjams* of 70 yards. If he wants a width of, say, 30 *punjams* of 105 yards, he would buy 22½ *kals*, or if he wants 35 yards of 30 *punjams*, he would buy 7½ *kals*. Thus he always uses multiples or fractions of 70. He, therefore, finds it difficult to make proper provision when he wants a length of, say, 40 yards. A shortage of yarn is sometimes disclosed, and occasionally an excess, in which case waste results. The method of buying yarn on the basis of weight instead of length, which is now coming into use, will greatly help in remedying some of these defects.

Some of the defects of handloom cloth are due to the rather crude kind of reeds used. Hand-weavers base the width of their cloth on the reed they use. The reeds are supposed to contain a certain number of dents, but the

number of dents inserted in a specified area is not always uniform; nor are the bamboo splits of which the reed is made uniform in thickness. Consequently, the number of dents may vary from reed to reed. This also leads to a mistake in the estimate of the material required for the warp.

95. *Types of handloom cloth.*—Even in the heyday of the Indian handweaving industry, when there was a large foreign demand for artistic fabrics like muslins, chintzes, brocades, and *kinkhabs*, these specialities formed only a small proportion of the cotton cloth production. To-day with a much less steady demand, they are even a smaller proportion and the weavers in India are now making mostly cloths for the every-day wear of men and women.

The principal cloths now made on the handloom are as follows :—

(1) *Women's clothing.*—Sari, *lehnga* cloth, *susi*, *choli-khan*, *shalu*, *shela* and scarf. Sari is believed to be the most graceful of all the garments worn in India. A sari piece may be from 5 to 9 yards long and 40″ to 52″ wide; poor women's sari in Madhobdi (Bengal) may be only 4 or 4½ yards. *Lehnga* cloth is used for making the skirts of Hindu women in North India. *Susi* is a cloth used for the *salwar* (trousers) of Muslim and other women in the Punjab and Sind. *Choli-khan* is the blouse piece worn mostly in the Deccan and Karnatak. *Shelas* are scarfs generally 2 to 3 yards in length, mostly used in the Maharashtra.

(2) *Men's clothing.*—Dhoti (*dhotar*), *lungi*, chaddar, *uparni* and *angavastram*, *pagri* or turban cloth, shirtings, and coatings. A dhoti may be between 3 to 5 yards in length. A *lungi* is a coloured and striped or checked cloth worn mostly by Muslims and is 2½ yards long. *Chaddars* and *angavastrams* are wrappers or upper germents. Most turban cloths are long and narrow; the *phetas* made in the Central Provinces are 21 yards long and 8″ to 9″ wide; some are even 40 yards long. On the other hand, a variety of turban cloth used in the South is a square piece 1½ to 3 yards either way.

(3) *Common to both men and women.—Dupatta* (upper garment), longcloth, *motia* or *garha*, from which *kurtas* and coats are made.

(4) *For domestic use.—Pancha* or *gamcha* (towels), *durris* (carpets), curtain cloth, mosquito curtains, and *razai kholias* and *khes* cloth (for bedding).

96. *The importance of various cloths in handloom production.*—The quantitative position of these various cloths in handloom production can be seen from the following table in which the total production of important cloths is given, along with the proportion which each bears to the total production in the Province or State.

TABLE LV.—*Production of principal handloom fabrics (cotton) per annum.*

(In thousand yards)

Province or State.	Saris.	Dhotis.	Lungis.	Shirtings.	*Khadi, Garha* and *Gazi*.	Chaddars.
Assam (*a*)	..	..	..	..	..	..
Bengal (*b*)	59,300 (40%)	7,400 (5%)	59,300 (40%)	..	..	13,000 (9%)
Bihar (*a*)	..	..	..	..	..	..
Bombay	165,624(*c*) (95·1%)	..	..	200 (·1%)	8,382 (4·8%)	..
C. P. and Berar	78,257 (75·8%)	9,995 (9·7%)	..	2,947 (2·8%)	..	3,337 (3·2%)
Madras	180,883 (44·4%)	99,588 (24·5%)	66,399 (16·3%)	..	..	..
Orissa	22,453 (39·9%)	11,253 (20%)	2,850 (5·1%)	..	..	..
Punjab	..	..	15,000 (6·6%)	..	100,000 (43·9%)	45,000 (19·7%) (dutahis)
U. P. (*d*)	12,000 (4%)	..	15,000 (5%)	24,000(*f*) (8·1%)	180,000 (60·6%)	..
Baroda	230 (2·5%)	1,150 (12·4%)	..	144 (1·5%)	6,720 (72·3%)	172 (1·8%)
Hyderabad (*e*)	34,515 (45%)	10,455 (13·6%)	10,400 (13·6%)	..	..	..

(*a*) Not known.
(*b*) Bengal produces also 8,600,000 yards of Gamchas (6%).
(*c*) Includes *Choli-khans* also.
(*d*) *Lehngas* are an important line of production in the United Provinces and account for 45,000,000 yards or 15 per cent of the total production.
(*e*) About 21,240,000 yards of *choli-khans* are also produced in Hyderabad, and account for 27·7 per cent of the total production.
(*f*) Includes coatings also.

The above table gives some indication also of the styles of dress in the various parts of India. In Bombay, Madras, Bengal, and the Central Provinces, the sari is the most important line of production, while coarse *khadi* and *garha* cloth take the place of honour in the United Provinces and the Punjab. In Madras, dhotis and lungis are also important; in Bengal lungis form 40 per cent of the total manufacture. The above table necessarily takes into account only the major heads of production. There are certain minor heads which have to be taken note of owing to their growing importance. The increasing production of shirtings and coatings is noteworthy. Equally striking is the increase in the manufacture of certain speciality cloths like table covers, bed-spreads, pyjama cloth, mock-leno and Turkish towels, and a wide variety of furnishing fabrics. This is a significant change in hand-weaving and is due to the encouragement given by the Provincial Governments (notably of the United Provinces and Bihar) and by various charitable organisations. Nor does the table bring out certain notable changes that have come over the quality and appearance of staple goods like saris. More and more artistic saris are being produced on handlooms lately in order to meet the changing fashions of the women-folk. Both in the colour scheme and in designs, there has been great improvement. In olden days, only one colour was used, and generally indigo blue and turkey red predominated. With the introduction of synthetic

dyes, it is now possible to make a wide variety of shades and this factor has been utilized to a remarkable extent in the manufacture of saris in certain centres. We were greatly struck by the enterprise shown in this respect by hand-weavers, especially at Madura, Coimbatore, Sholapur and Dhanyakhali.

A survey of handloom cloths.

97. *Assam.*—We shall now make a rapid survey of the handloom cloths produced in the various Provinces and States. In Assam cotton cloth is manufactured mostly in the Surma Valley, chiefly by the Nath weavers. The principal cotton fabrics are saris, dhotis, *gamchas*, *chaddars*, *lungis*, plain shirtings, fancy shirtings, screens, table cloths, *mock-lenos*, *mekhalas*, *rihas*, wrappers, bed sheets, borkapurs, coatings, napkins, furnishing fabrics, towels, pilerugs, etc. Details of some of the principal types of cotton cloth are as follows :—

TABLE LVI.

Fabrics	Normal dimensions.	Average counts of yarn used.
Grey dhotis	40″ × 4¾ yds. .	22s.
Grey or coloured saris	42″ × 4¾ yds. .	22s and 24s.
Grey and checked Assamese *gamchas* . . .	27/30″ × 1¾/2 yds.	20s.
Grey and checked Bengali *gamcha* . . .	27/30″ × 1¾/2 yds.	14½s and 16½s.
Coloured, bleached or grey *mekhalas*, rihas with crossed borders.	36″ × 2¾ yds. .	20s, 40s and 2/84s.
Grey borkapur (a winter chaddar) . . .	52″ × 6 yds. .	40s.

Silk is manufactured in the Assam Valley and the fabrics made are *mekhalas*, *rihas*, *chaddars*, plain cloths (*thans*), saris, shawls, shirtings and coatings. Some improvements are noted in the nature and scope of weaving in Assam. Production was formerly confined to saris, *gamchas*, *mekhalas*, etc.; latterly, weavers have taken up curtain cloth, napkins, table cloths, furnishing fabrics, bed covers, etc. The weavers have also taken more to the use of mercerised cotton yarn and artificial silk yarn in place of cotton and silk yarn. New designs have been introduced on such types of cloth as screens, table cloths, napkins, furnishing fabrics, etc. Some standardization of handloom products has been secured by the Industries Department through its emporiums. Not much difficulty, however, has been experienced through want of standardization of the products, because the weavers in Assam do not cater for outside markets.

98. *Bengal.*—The principal types of hand-woven products are saris, dhotis, chaddars, *lungis*, *gamchas*, bed sheets, towels, shirtings, coatings, *purdah*, gauze, bandage cloth, *bandipota*, mosquito curtains, bed covers, furnishing fabrics, table cloth, napkins, etc., in cotton; tassar dhotis, saris, shirtings and chaddars in silk; and scarfs and shawls in wool. The products of the handloom industry range from the cheapest *gamchas* to very costly saris and the range is remarkable also in the counts used. There are some weavers who

specialise in the weaving of very fine counts, *viz*, 110s, 120s, 130s, 200s and 250s. They produce dhotis, saris and *uranis*. Dacca and Santipur, Rajbalhat, Autpur, and Tangail form the principal centres of fine weaving.

In the Bankura District, 4½ yards saris of 40s counts with 1" or 1½" coloured border known as *laita* are woven, and are used by the agricultural classes to a great extent. Quite a number of saris with 32s grey warp ×26s coloured weft are woven for local consumption. The Santipur saris are mostly above 80s and are with coloured stripes or check spots on a grey or white (dhobi-bleached) ground. Sometimes a coloured weft is also used with a grey warp. Silk yarn and gold and silver threads are used for dobby and jacquard borders in the finer types of saris. The borders extend from 2" to 6" in width. The *jamdani* is another well-known type of sari which is similar to the *paithani* saris woven in the Nizam's Dominions. Either cotton yarn of 100s or a silk warp and cotton weft of 100s are usually to be seen in the styles of such saris with borders 2" and over in width and headings and ground embellished by embroidery with fivefold 60s cotton warp. At Dacca, a plain-coloured bordered sari, with or without *jari*, called *Vita-sari* is woven. The Tangail saris are usually made from yarns of 80s to 120s and even up to 200s. The borders are about 3" to 4" in width, for which artificial silk and (gold and silver) lace are used. Saris with a coloured warp and coloured weft are not uncommon. The normal dimension of a Tangail sari is 48"×11 yards. In Demra and Narisha, in the Dacca District, saris of 38/40/42/44"×8/9/10 yards are woven from dyed cotton yarn, mostly blue, of 40s counts. These saris have some traditional names originating from the borders or stripes. The principal ones are: (*a*) *Gulbahar* saris, which have a figured border of 2" in width and 8 stripes about 2" wide appearing widthwise for every 5 yards' length; (*b*) *Kanchanmala* (gold garland) with a border comprising two aces of spades, two thick lines and two fish designs, and (*c*) *Kakui* or comb design in the border on a plain ground. Another old design, known as *Motore* or "pea" consists of spots, running in the form of a stripe one after the other. The name *Nilambari* is generally applied to all saris on which a deep navy-blue or black ground is worked with a plain or fancy border. The Department of Industries has been successful in introducing a variety of shades of different colours and all types of printed yarn in the borders as well as in the ground.

In *lungis* or *taffans* also, the tendency for using higher counts is noticed. The counts of yarn used have gone up from 20s×24s to 26s×26s and 32s×26s.

Coarse types of dhotis 36"×2½ yards; and 12s warp ×15s weft, with ¼" coloured border, known as *Kachas* are woven in the Bankura District. The fine dhotis known as *Daccai dhotis* or *Santipur* dhotis are woven in Rajbalhat.

It is said that competition among the weavers has led to the adoption of improved methods in some centres and to the production of a better class of fabrics. At the same time, in order to cheapen production such practices as the use of inferior quality yarns, shortage of length or breadth, etc., are sometimes resorted to. After 1918, the Department of Industries introduced improved appliances such as dobbies and jacquards. A large number of students have been trained at the Textile Institute at Serampore. The Department has also succeeded through peripatetic demonstrations in introducing new styles of weaves. The want of standardization in handloom

products makes large-scale supplies according to specifications difficult. The Bagerhat Weaving Union and the Women's Industrial Home at Dum Dum have, however, introduced some standardization. Arrangements for warping, sizing and dyeing on a large scale on mill methods have been made there.

99. *Bihar.*—The principal types of cloths woven on handloom in Bihar are saris, chaddars, *gamchas;* coatings and shirtings, *lehngas*, *motias*, *thans* (pieces), mercerised coatings and shirtings, and cotton suitings, in cotton; chaddars, shirtings, suitings, handkerchiefs and scarfs in silk and artificial silk; and blankets and asri in wool. Saris, chaddars and shirtings are also woven with mixtures. Under the auspices of the Bihar Cottage Industries emporium maintained by the Government, a considerable number of weavers are turning out furnishing fabrics such as curtains, bed-spreads, table linens, upholstery cloths, drapery, net leno cloth for underwear, mosquito curtains, mock-lenos, bedford cords, twills and longcloths. Blouse cloths, towels and *kheses* have also been taken up by several weavers. Great care was taken to make improved designs, and about 120 patterns of furnishing fabrics and 115 of staple goods (dhotis and saris, etc.), have been standardized by the Bihar Cottage Industries. Most of the fabrics that are woven in Bihar are of grey and not dyed yarn. Grey dhotis, saris and chaddars are preferred to bleached ones in some districts. The Bihar Cottage Industries have at Gulzaribagh a finishing plant which undertakes to bleach and finish hand-woven cloth on payment. The coloured furnishing fabrics, lungis and saris, however, do not require machine finishing.

A tendency for change from low to medium counts is discernible in the clothing of men and women in Bihar, and the handloom weavers are also changing their lines of production accordingly. Owing to the encouragement given by the Government, many of them have taken up the weaving of cotton, silk and artificial silk shirtings, lungis, towels, etc., and even in up-country areas many weavers have changed from coarse saris and dhotis to medium-count cotton saris, artificial silk saris, staple fibre shirtings, lungis, etc. Some years ago, the weavers of Bhagalpur and Manpur gave up tassar silk weaving, and, after trying cotton yarn, linen thread, spun silk yarn and artificial silk yarn during the last 20 years, are now using staple fibre for the production of shirtings and coatings, and artificial silk yarn for saris, turbans and chaddars. The cotton weavers of other places who had been using yarn of 7s to 16s have changed over to finer counts up to 40s producing dhotis and saris. Attractive checks and stripes of coloured yarn are being introduced on the traditional *motia thans*. The quality of handloom goods is not being maintained uniformly. The weavers in order to meet the competition among themselves and with mills resort sometimes to various malpractices, and thus the quality of hand-woven goods has suffered to some extent. Nor has standardization for the handloom goods made much headway, except in the case of certain furnishing fabrics and a few staple goods that have been standardized by the Bihar Cottage Industries.

100. *Central Provinces and Berar.*—The chief types of hand-woven cotton piece-goods in the Central Provinces are saris, dhotis, *uparnas*, *chaddars*, handkerchiefs, *pugris*, *gonas*, shirtings, coatings, etc. Saris are woven out of from 10½s to 80s counts and are from 36 to 50″ in width and 5 to 11 yards in length. Some of the saris are plain; others are striped or checked with mercerised cotton, artificial silk or silk yarn and with borders of mercerised

cotton or artificial silk; and some others are made with a cotton warp and a silk or artificial silk weft, or *vice versâ*. The chief silk goods are *pheta* cloth and shirtings, saris, dhotis and coatings. Artificial silk handkerchiefs and woollen blankets are also woven. Saris form the bulk of the mixture fabrics.

Through the efforts of the Government, fly-shuttle sleys have been made popular and improved appliances such as dobbies and jacquards have been introduced. There is however, no proper standardization of the cloth and this affects the handloom industry adversely. A private association at Nagpur, the Koshti Hita-Karini Mandal, is attempting to standardize the degree of fastness of the dyes used in producing saris. They affix a stamp on the fabric guaranteeing the fastness of the dye. The chief aim of the Central Provinces and Berar Weavers' Co-operative Society is also to standardize its products in respect of the quality of raw materials, colour, dimensions, etc. and it has succeeded in its efforts to some extent.

101. *United Provinces.*—The principal types of cotton fabrics produced in the United Provinces are as follows:—

TABLE LVII.

Fabrics.	Normal dimensions.	Approximate counts of yarn used.
Gazi and *garha*	30″ × 12 yds.	16½s × 10½s.
Lehnga and *tapti*	29″ × 12 yds.	20½s × 14½s.
Lungis and *tehbands*	40″ × 2½ yds.	16½s × 14½s.
Shirtings and coatings	30″ × 12 yds.	16½s. × 16½s.
Dhotis and saris	45″ × 5 yds.	20½s × 16½s.
Durris	45″ × 2½ yds.	Largely hand-spun.

The silk fabrics of Benares are famous for their elegance of designs, for their beautiful colour matching and for their complicated textures. Most of them are interwoven with *jangla* (gold thread) or *badla* (silver thread). The peculiar feature of a real Benares fabric is that the figures are developed with extra warp and extra weft. The special types of fabrics that are produced on the handlooms are, *saris, ornis, kinkhabs, brocades, sanjafs* (borders), Kashi silk (spun silk), shirtings, coatings and chaddars. The lighter type of Benares saris woven on jacquards, in which extra warp figuring is developed, is called *lucha*. On the popular Benares saris, the figuring is developed by extra weft on a *jala* or a draw-boy loom. A repeat of the design is first worked out by means of strings on a frame and this design is shifted bodily on the draw-boy loom by trying the cords with the figuring harness. It is said that the arbitrary reduction of prices on every bazar day has compelled the weaver to cut down his costs by deteriorating the quality of his products. The Industries Department is trying to get standard goods made and supply goods to wholesale buyers according to fixed standard and fixed prices. The United

Provinces Government have also taken the lead in the introduction of improvements in the art of dyeing in fast colours, new designs and new styles of fabrics. The United Provinces Handicrafts at Lucknow and other emporia maintained by the Department of Industries have not only tried to introduce new varieties of fabrics other than of plain structure but have also paid attention to the types of cloth largely worn by the villagers. They have also tried to confine such styles to what the mills are not producing.

102. *The Punjab.*—In the Punjab, the important cotton fabrics produced are *garha, khes, dotahis, chaddars,* coatings, shirtings, curtain cloth, *sufi, tehband lungis, durris,* towels, dusters and *fatkas.* It is said that many weavers had to change to lower counts on account of mill competition in the finer goods. The finer lungis, white *pugris* and muslins are no longer produced in the Punjab to any considerable extent. The important silk fabrics produced in the Punjab are *gola daryai, mushadi lungis, tehband lungis,* coatings, shirtings, saris, *dupattas* and *pugris.* Artificial silk products are mostly shirtings, coatings, saris, lungis and curtain cloth. The important centres which produce silk and artificial silk goods are Multan and Jullundur. Bosekis, satins, saris, coatings and shirtings are also made in mixtures, while blankets, *lohis, lokars, tureds, chaddars, shawls,* carpets, etc., are the important woollen goods produced. The use of cotton and silk cloths has gone down in the Punjab and artificial silk and worsted goods are coming into prominence.

The Department of Industries has through their textile institutions sought to give training in designing and to introduce improved appliances such as dobbies and jacquards. The jacquard floral designs are fast replacing the traditional geometrical designs of the *majnu khes.* No uniform quality in handloom products is maintained in the Province. This is the result of competition amongst the weavers themselves, and to some extent also of malpractices among the dealers who in their anxiety to push forward the sales instruct the weavers to lower the quality of the fabrics. Lack of standardization of handloom cloth has adversely affected the industry. Recently, however, the Industries Department through its special marketing organisations at Amritsar and Panipat has attempted standardization of cotton and woollen fabrics.

103. *Sind.*—More than 90 per cent of the handloom production in Sind consists of *Susis* and *kheses. Susis* are plain striped coloured fabrics, with or without dobby figuring effects and are used for making women's garments. The average dimensions are 23" × 18 yards. *Kheses* are coloured double-cloth fabrics usually 33" × 10 yards, used for bed covers. The other important handloom fabrics of the Province are *lungis,* silk and *jari* work, shirtings and coatings, *angochas,* etc. It is said that the quality of the *susi* cloth has deteriorated owing to competition among the weavers.

104. *Bombay.*—The principal types of goods produced by handloom in the Bombay Province are *saris, khans, pasodis* or *pachcharis, guda pattis, soryas* (carpets), dhotis, panchas, shirtings, coatings, table cloths, napkins, furnishing materials, chaddars, bed sheets *sujnis* (counterpanes or bed covers), towels, *niwar pattis,* silk *paithanis,* silk *phetas,* silk shirtings, silk *kads,* silk *muktas,* silk *shalus,* silk *shelas,* silk brocades, etc.

It has been stated that 90 per cent of the handlooms in the Province produce saris and *khans* from different kinds of dyed yarns. Quite a large number of saris are also prepared with cotton yarn for body with pure silk, artificial

silk or mercerised cotton folded yarn for border and headings. The width of a sari varies from 43" to 52" and the length from 5 to 9 yards. *Khans* are generally 30" to 32" in width with borders from 5" to 8" in silk or artificial silk with or without extra warp figures in the body of the *khans*. Bombay has certain sari patterns called after the names of important centres where they were first made; hence the names, Ilkal saris, Nipani saris, Maheswari saris, etc. This is because the weavers in Bombay stick to some traditional patterns and designs. In Bengal and Madras the weavers combine various designs independently and produce diverse patterns, and therefore place names are not so commonly used. Recently, however, independent designs have been in use for fancy *patals* in Bombay also.

The peculiarity of the Ilkal sari is the traditional border (ranging in width from 2½" to 4") in which the red colour always predominates; it may also be of the *Ganga-Jamuna* type, with two different colours for the borders. There are usually three types of Ilkal borders: *gomei* with bugri, *pharaspatti*, and *ruiphul*. *Gomei* is a small herringbone stripe (like a small arrow) usually of white colour (artificial silk) between two small yellow stripes. There are generally four *gomeis* in one border. The whole border ends in a couple of *bugris* or *karwatis* (sawlike design). In many cases the yellow stripes, the white *gomei* line and the *bugri* are developed on artificial silk. In the *ruiphul* border small flower designs (cotton flowers) are substituted in white colour for the *gomei*, and like the *gomei* four rows are woven. In the *pharaspatti* (diamond weave reversed) three or four lines of *gomei* of a plain red colour are arranged, with wider space between. The 'Maheswari' type of saris have borders 1½" wide with the same designs as in the Ilkal type. The Ilkal saris generally have an attractive *anchu* or *padar* (heading) at the front of the sari across the width. In hand-woven saris the width of such *padars* varies from 18" to 24". The padar when woven in solid colour is known as *tope padar* and when in such padars a wavy design is introduced, it is called *tope teni padar*.

Saris are also known by different names according to the colours used. A *chandra-kala* sari is of black ground with red border while a *mirani rasta* is a striped sari of a deep chocolate and black colour. These borders and the colours are a long-established tradition with the handloom weavers. Saris of the same dimensions with or without coloured ground but bearing borders of different designs other than the traditional types and of different colours are called fancy *patals*. Through the efforts of the Department of Industries the weavers have been induced to abandon their traditional lines, take to finer counts and produce new types of saris different in colour, design and border. Some of these new designs have been named after cinema stars and others given catching names like *Holi*, *Nainsook*, *College Girl*, *Darling*, etc. Dholka, Bijapur, Ahmednagar, Belgaum, Sholapur, Malegaon, Dhulia, Ilkal, etc., are the important sari making centres in Bombay. Though there is no regular standardization in Bombay, as a rule the handloom industry attempts to conform to such standards as regards size, length, width, texture, fineness, etc.

105. *Madras.*—The principal types of fabrics produced in Madras are saris, dhotis, *angavastrams*, towels and *lungis*. Other types usually woven are: *surams*, *kailis*, Madras handkerchiefs, turban cloths, *panchas*, bed-sheets, curtain cloth, table cloths, napkins, furnishing fabrics, shirtings, coatings, etc.

The important silk goods as well as artificial silk goods are: saris, coatings, shirtings, *angavastrams* and *lungis*.

The Madras saris are generally of fine texture, and mostly coloured. Some are with figured borders. Some again have gold or silver thread interlaced or have *kuppadam* (solid border). In spite of these differences, they are all called by the name Madras or Madura saris, and are in great demand all over India. The saris are from 36 to 52 inches wide and from 5 to 9 yards long. The average normal dimension of a sari is 47/48″×8 yards. Any counts from 12s to 150s are used and a considerable number of shades of dyes is employed in their production. In the Tamil Districts and also in the Kanarese areas the saris are coloured, while in the Telugu areas white saris with coloured borders are used. Although Madras saris are known in the rest of India under this generic name, several distinctive features characterise the saris made in different centres like Madura, Coimbatore, Salem and Uppada. A few points of difference between Madura and Coimbatore saris may be noted. For goldlaced saris, only pure gold lace is used in Coimbatore, while in Madura all kinds of gold lace are used according to the ultimate selling price of the cloth. The Coimbatore saris again have invariably dobby or figured borders while the Madura saris have plain borders with a variety of coloured designs. In Coimbatore the same counts of yarn are always used both for the warp and the weft while in Madura no such rigid practice is observed. In Coimbatore, both the warp and the weft are dyed, while in Madura a grey warp with a dyed weft is very frequently used. The borders of the saris have been given fancy names mostly of the cinema stars and the shades called after the market where they are preferred. Thus we find names like *Devikarani*, *Ashok Kumar*, *Kanchanamala*, and also *Karachi*, *Bengal*, *Mysore*, etc. Sometimes combining the border and the shade they are called *Bengal Devikarani* and so forth. Some of the sari designs are also called by such peculiar fancy names as *Hitler's bomb*, *Prabhati sari*, *Thyagabhoomi*, etc., after the name of a much-discussed picture or person. Usually every sari has a plain heading generally of artificial silk of about 3 to 6 inches in width. In some of the saris, fancy headings such as *Poona Mundani* (about 8½″) and *Bangalore Mundani* (up to 16″) are to be seen. Plain saris are generally known by the name of the colour used in the dyeing of yarn; for instance *Nagappalam* (black) or *Puliyam* (Tamarind red). The *Irukarai Namathari* is a sari with two thick red stripes somewhat in the style of the *Nama*: and the *Dandavalam* sari (straight parallel lines) is a striped sari with yellow and maroon coloured yarn in the body. The *Mallimoghu* (flower bud) sari and *Puliyam Kottai* (Tamarind nut) sari owe their names to the pattern in imitation of a flower bud or a tamarind nut used in the border. The *Kathari* (ribbon) border in a sari seems to be very popular now-a-days.

Silk, artificial silk and gold lace are used to a large extent in the development of the borders and headings of saris, dhotis and *angavastrams*. The special types of saris and dhotis woven in the Salem District with silk headings and borders are known under a variety of names such as *Gundanchu*, *Lakkanchu*, *Basanchu*, etc. The ground in all cases is white and the width of the borders varies according to the style of the cloth. In dhotis the borders do not exceed an inch and in saris they are from 1″ to 2″. In Madras, turbans and rumals known as *Garbha sudhi* with a cotton warp and silk weft with borders of silk and gold thread are woven in a small quantity. In the Salem District

Bodabachi rumals of about 47"×47" are woven. Special types of shuttles with weft dyed differently at different lengths according to design are used for the purpose. These rumals are exported to Aden, Africa, Turkey, etc., where they are known as *Asia rumals*. At Masulipatam, the remnants of the old *kalamkari* prints are still seen. But the industry is dying out because the process is expensive and it cannot compete with imported prints of attractive designs. *Palampore* is a type of cloth used for door curtains, bed spreads, etc. The peculiarity of this fabric is that the surface of the cloth which does not require any particular colour is covered with a coating of wax and the cloth is dyed, the process being repeated several times till the required shades are obtained.

Madras handkerchiefs are an important class of cloths produced in Madras. Every bit is 36 inches square, and there are eight such bits in each handkerchief. Yarn of 40s and 60s is generally used. Sometimes, Madras handkerchiefs are embroidered. They are dyed in a peculiar way, being treated with turmeric, and the dye gives a certain taste and smell to the fabric, and it is said that the natives of West Africa, to which they are largely exported, satisfy themselves before buying them by tasting the cloth with their tongues and by sniffing in the smell. Lungis or kailis and sarams woven in Madras, command a wide market in India, and outside in such places as Malaya, Burma and West Africa.

In Cannanore, Calicut and other places in the Malabar District, the manufacture of coatings and shirtings was started in the Basel Mission factories as early as 1851. The fabrics turned out are attractive from the point of view of the latest designs and cheapness and the goods are sold all over India. The styles of cloth made here have been copied in adjacent districts of the Presidency, especially in Erode and Trichengode. In these places, a few *sowcar*-weavers employ hundreds of weavers under them for making shirtings and coatings for the Indian market and for Ceylon and Malaya.

The Government of Madras have long been keen on the popularization of improved methods and appliances. Their efforts have resulted in the introduction of the multi-coloured lungi designs and the "firefly" effect on coatings, shirtings and saris. The quality of the handloom products, however, has not been uniformly maintained. There is no standardization in the products of the handloom industry. This renders marketing of handloom products in bulk almost impossible. However, some degree of standardization is now obtaining in respect of certain well-known varieties of cloth such as Pedana saris, Erode *veshtis*, Kalladakurchi towels and the laced saris of Madura, Pullampet and Nellore. Their texture is fairly uniform and their colours fast. The introduction of a system of trade-mark with reference to quality, etc., may be of considerable help. A merchant at Erode is trying such a trade-mark "101" for a variety of shirting.

106. *Orissa.*—The principal types of cloth woven are saris, dhotis, lungis, bandage cloth and gauze. The saris are generally from 42" to 46" in width and measure from 5 to 6½ yards. The normal length is only 5 yards. The peculiarities of weaving technique are seen in the saris and dhotis with *Kumbha* border where the warp and weft have been used in developing the figures and in the conventional designs of animal figures worked on purdahs, table covers, etc., woven at Sambalpur and Dhalapathar and the figured borders and headings in dhotis and saris produced at Thakurpatna and Barapatti. The working

out of designs by dyeing the yarn by the knotting system on *khanduas* (ladies' wrappers) at Osling deserves special mention. The Government of Orissa have been successful, through their Textile Expert, in introducing improved appliances and new designs. Dobbies and jacquards are now in use and unorthodox fabrics like bed-spreads, table covers, etc., are slowly being taken up by handloom weavers. Owing to competition, the weavers in many cases sell cloth of inferior quality at a cheaper price and thereby lose the confidence of their customers. The introduction of standardization of handloom fabrics should obviate this defect.

107. *Hyderabad.*—The principal types of cotton goods manufactured in the Hyderabad State are saris (36/44"×7 yds.), grey *patals* with grey ground and red border (36/44/48"×7/9 yds.), *pugris* (grey or coloured, with gold lace headings, measuring 9/12"×20/60 yds.), grey *panchas*, plain striped *susis*, *choli-khans*, dhotis, *durries* and *sataranjis*. Among silk, saris, *choli-khans*, *shamalas* and *rumals*, *tafetta*, *muktas*, *madi pancha* (with jari borders) and pitambars are the important fabrics, while in artificial silk, rumals, saris and *choli-khans* are prominent. Striped or checked *kamblis* and *jhoras* are produced in wool.

Some of the special fabrics made in the State are :—

(i) *Chutki saris and rumals*, which are also known as *talia saris* and *talia rumals*. They are made from yarn of 20s, 30s, or 40s. The warp and weft yarns are knotted, according to the designs, and dyed. (ii) *Lungis*, which are known under different names : *mamurans* have two or three ends of yellow and red stripes on a plain indigo blue ground ; *chandra-kala* is of plain indigo blue ground ; *neya-ikhitiara*, striped without any design ; *sungareddy* is indigo and white checked ; *mamol* is a check pattern with about 20 ends of indigo blue and two white ; *adden black*, woven in broad stripes with diamond designs on an indigo blue ground ; and *aden papia* woven in broad stripes of yellow colour with diamond weave. (iii) High-class *pagris* and saris are woven in Paithan. The Paithan work is mostly of extra weft figures like the Benares saris. (iv) *Gundals* are *pagri* cloths about 9" to 12" in width and 20 to 60 yards in length woven from 40s and 60s grey cotton yarn with gold lace headings. (v) *Himru* is a figured brocade made of cotton warp and cotton weft, silk and artificial silk yarn being used for ornamentation on the face side. This is generally used for *sherwanis*, waistcoats, etc. Aurangabad is famous for this article. (vi) *Mushroo* is a mixed fabric with a mercerised coloured warp and silk weft in satin weave. Mushroos are used for the purpose of *lehngas* and ladies' pyjamas. Sometimes pure silk *mushroos* are also made. (vii) *Kinkhab* is a figured brocade with silk and gold thread. The gold threads are skilfully worked so as to appear on the obverse side only. Red and yellow striped satin effects obtained by a peculiar system of dyeing are known as *gulbadhan*. Kinkhabs of Benares are manufactured by experts but in Aurangabad it is produced by all. (viii) The weaving of *kagdas* (borders) for saris and blouses, etc., is carried on extensively. These are made from cotton, silk and gold and silver threads. They are of four types : (*a*) *Nakigotta*, with gold or silver lametta (flat filament) in the warp with a silk weft woven as a plain basis ; (*b*) fancy gold and silver laces with warp and weft of gold or silver thread and silk, woven in different designs and patterns ; (*c*) *purtulla*, of a

cotton twisted warp with gold, silver or silk weft in different designs and patterns and (*d*) *choli-khan* borders with silk warp and silk weft with a gold thread for ornamentation.

The State gives every possible encouragement to the improvement of the industry and employs artists who supply designs to the weavers. Designs from the paintings of the Ajanta Caves are being copied and made available to the weavers. Owing to competition among the weavers themselves, the quality has deteriorated to some extent. There is no clear line of demarcation by which standards may be gauged, but rough standards have been fixed at some centres for saris, dhotis, *lungis*, *rumals*, etc.

108. *Baroda.*—The principal types of goods manufactured in Baroda are *gajia* (plain cloth) and *khaddar*. These are made from cotton yarn of low counts ranging from 4s to 20s, and are chiefly produced in the Mehsana, Baroda, Amreli and Navsari districts. Other important cotton goods are *pankora*, *pichhodi*, *sadla-bharwadi*, *potadi* and *pania* (dhotis), *thepada*, *gaghra pat* (for petticoats), *kholia* (coloured cloth for quilts), *chofal*, *khes* and *malda* (coloured cloth for floor covering or bags), brocades, *pitamber* (silk dhotis), saris with or without gold thread, patolas (special kind of saris where the pattern is obtained by the " dip and tie " method of dyeing) and Chanderi *khans* (with gold thread spot designs) are the chief silk goods. Artificial silk goods are mostly coatings, and *mashru*, a satin weave with artificial silk warp and cotton weft. Saris here vary from 45" to 54" in width and from 5 to 6 yards in length. The saris are named *Begoti* and *Char-goti* according to the number of lines,—two or four—of the pattern known as *ruiphul* (cotton flower). The *chandrakala sumsali* is a striped cotton sari with four black and four yellow threads running together with a silk border. The borders, more or less, follow the same type of designs as in the Maharastra province of Bombay. The State has opened a sale depot in the Diamond Jubilee Cottage Industries Institute, where arrangements have been made to stock and sell the cloth received from the handloom weavers. The Kalabhavan Technical Institute trains up boys in the art of hand-weaving, and demonstration classes give the weavers training for using improved appliances. New styles of fabrics, such as teapoy covers, napkins, *susis*, etc., are also being introduced. A tendency for changing over to finer counts is now discernible. Competition among the weavers has led to the deterioration of the hand-woven goods. There is a lack of standardization which stands in the way of the sale of handloom products.

109. *Cochin.*—In Cochin, generally speaking, plain weaving of uncoloured goods of yarn from 12s to 150s is carried on. The use of coloured yarn was confined to the weaving of borders for the typical Malayalee dress where borders were very narrow. But recently with the increasing popularity of saris, coloured designs are the order of the day. This has also affected the Malayalee dress where coloured borders are getting more and more bold. The principal types of manufacture are : towels (32/36" × 56/63"), *veshtis* and dhotis (52" × 4 yards), and *neryathus* (45" × 2½/3 yards) with or without gold lace border. The quality of the cloth has much deteriorated and the people have to a certain extent lost confidence in handloom products. There is no standardization and the same cloth sells for different prices in different localities.

110. *Gwalior.*—The chief products of Gwalior are grey *khadi*, grey dhotis, grey dogha (for quilts), *mehmudi*, *khes*, and towels. Chanderi is a well-known weaving centre for fine fabrics and the important goods produced there are

lungra, made of silk warp with flowers of gold thread in the body and a cotton dyed weft of 140 counts with 2" silk border and lameta lines ; *lugada* made of silk warp with gold thread and 160s dyed cotton weft, having a 3" border with designs ; and *safa*, made of 100s warp and 100s weft, with gold border and gold figured headings. It is noteworthy that in Chanderi the figuring work is done by the old draw-boy loom.

111. *Jammu and Kashmir.*—The chief types of goods manufactured by handlooms in Jammu and Kashmir are *khaddar*, *susis* (coloured cloth for muslim ladies' pyjamas), *kheses*, shirtings, coatings and dhotis, in cotton ; shirtings, coatings (bosaki), ladies, dhotis and *dupattas*, *lungis* and *daryai* in artificial silk ; plain-striped and figured dhotis, saris and shirtings in silk ; and tweeds, *blankets*, *namdas*, *pattu*, etc. in woollens. The total production amounts to 15·792 million yards of piecegoods and about 48,000 square yards of *gubbas*, *namdas* and pile carpets.

112. *Indore.*—The fabrics produced in Indore are Maheshwari saris, with or without gold lace, white drills and *safa* cloth. Shirtings and coatings in silk are also manufactured. Though there is standardization in some designs, in the case of many goods texture, quality of yarn, fastness of colour, etc., vary.

113. *Mysore.*—The principal types of cloth woven in Mysore are cotton dhotis, cotton *dupattas*, cotton saris, silk saris and woollen *kamblis*. The saris are generally 46"×6/9 yards, and the dhotis, 54"×8/9 yards. Though there has practically been no change in the lines of production shifts have occasionally taken place from real silk to cotton sari weaving and from cotton dhoti weaving to cotton and artificial silk sari weaving. The State has maintained peripatetic demonstration parties for the supply of new designs and also made arrangements for the supply of yarn at favourable rates to the handloom weavers through the yarn depots under their control. On account of competition among the weavers the length, width, picks per inch and reed of the various products are not strictly adhered to, so that no standardization of the products is obtained.

114. *Travancore.*—The principal types of goods produced in Travancore are *chela* (women's wear), *mundu* (dhoti), *neriyathu*, (upper cloth with or without gold lace or border) and *thorthu* (coarse towel). A certain quantity of *kailis*, *lungis* and saris are also produced. At Nagercoil, the weavers are supplied with ready made warp from Madura and saris after being woven on the Madura style are taken there. The peculiarity of the technique in hand-woven products lies in the working of a *chittu*, that is a thick-coloured stripe about ½ inch wide and 1½ inches long developed at the four corners of the *thorthu*. Saris, shirtings, towels, window curtains, bed-spreads, etc., are now being slowly introduced among the weavers through the efforts of the Central Travancore Weavers' Co-operative Society. The *mock-leno* weave on *thorthus* was first introduced at Attingal and all thorthus with that weave are called *Attingal thorthus*. Another peculiarity is that fancy woven borders are being replaced by printed borders. The Government of Travancore has been trying to introduce improved appliances and modern designs. Lately the Central Weavers' Co-operative Society working under the auspices of the S. S. Memorial Institute has taken up the matter seriously. The Institute has also made some efforts at standardization and the " Institute quality " is insisted on in regard to shawls, towels, shirtings and door curtains.

115. *Kolhapur and Deccan States.*—In Kolhapur and Deccan States, the principal types of cotton cloth produced are dhotis, saris, *dandias* (small dhotis), lugaris, and coarse *khadi* saris. Coarse woollen country blankets, known as *ghongadis* are woven from hand-spun woollen yarn, while *asans* and smaller *durris* are also made to a small extent.

Costs of Production.

116. *Production costs of handloom cloth.*—Production in organised industries is carefully planned by calculating costs beforehand, and it would be possible by a reference to account books to find out the exact cost of a yard of cloth, and the different elements that go to make it up. But the handloom weaver, whether he works independently or for a mahajan, does not worry about the costing. He purchases his yarn on the basis of some crude calculations which often involve waste. He hardly keeps any accounts. Even the account of his yarn purchases is generally kept by the mahajan and all that he is concerned about is the amount of remuneration which he receives for his work. In these circumstances, any proper cost-accounting can only be carried out by some experienced investigator watching and recording daily the various items of cost incurred by the weaver. This is obviously a difficult undertaking. Nor are we concerned with costs to such an extent as to undertake a very minute study. A cost analysis is indeed a principal feature of (*e.g.*,) a Tariff Board enquiry, because the object of such an enquiry is to find out what measure of protection would enable the home industry to compete successfully with imports. Such an objective has not been envisaged for the present enquiry. Nevertheless, it is necessary to know what the items of cost in handloom production are and their relative importance. We have collected some data from various parts of India in this connection and an analysis of them may be found in Appendix XXVIII. In Table LVIII below, we summarise the data available.

TABLE LVIII.—*Costs of production of handloom fabrics.*

Fabric.	Province or State.	Cost of material as percentage of total cost.		Cost of labour as percentage of total cost.	
		Yarn.	Other material.	Preparation.	Weaving.
1	2	3			4
Kaili (9½s × 13½s) . . .	Madras . . .	50·0	8·2	19·8	21·9
Sari (20s × 20s)	Bombay	56·4	10·3	17·9	15·4
Dhoti (20s × 20s) . . .	Madras . . .	66·9	3·3	11·2	18·6
Sari artificial silk and Cotton (20s × 24s).	Madras . . .	60·0	..	20·0	20·0
Coloured Sari (24s × 24s) . .	Madras . . .	79·7	1·6	7·0	11·7
Coloured Sari (25s × 25s) . .	Ichalkaranji . .	70·8	11·8	2·6	14·8
Sari (30s × 20s)	Bombay	63·3	6·7	13·3	16·7
Dhoti (30s × 30s)	Mysore	70·9	..	9·9	20·2
Dhoti (30s × 40s)	Baroda	80·0	..	..	(a)20·0
Sari (40s × 40s)	C. P. & Berar . .	55·0	19·0	(b) 2·4	23·6

CHART II.

To face para. 116

Diagrams showing the percentage costs of yarn, other material, preparation and weaving.

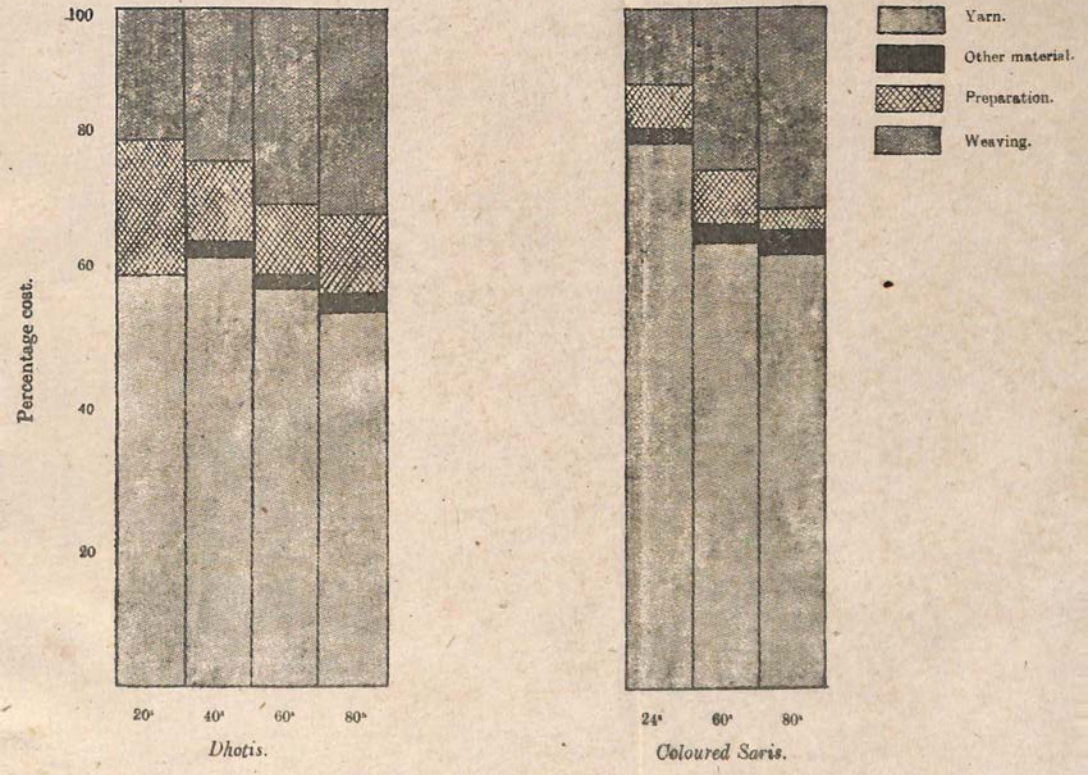

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TABLE LVIII.—*Cost of production of handloom fabrics*—contd.

Fabric.	Province or State.	Cost of material as percentage of total cost.		Cost of labour as percentage of total cost.	
		Yarn.	Other material	Preparation.	Weaving.
1	2		3		
Cotton sari (40s × 40s)	Madras	66·7	8·3	10·4	14·6
Dhoti (40s × 40s)	Madras	63·5	1·9	11·9	22·7
Dhoti (40s × 40s)	Orissa	53·3	3·7	19·6	23·4
Dhoti (figured border) (2/40s × 14s)	Orissa	61·8	5·9	8·8	23·5
Sari (coloured) (60s × 40s)	Madras	52·2	13·0	8·7	26·1
Sari (coloured) (60s × 60s)	Madras	64·8	3·0	8·1	24·1
Dhoti (60s × 60s)	Madras	58·6	1·8	10·8	28·8
Sari (60s × 60s)	Orissa	44·4	21·8	12·7	21·1
Sari (70s × 70s)	C. P. & Berar	48·8	..	7·5	43·7
Dhoti (70s × 70s)	C. P. & Berar	52·8	..	11·1	36·1
Sari (Resam border) (80s × 80s)	Bengal	50·0	2·1	9·4	38·5
Sari (jari border) (80s × 80s)	Bengal	19·0	49·0	4·5	27·5
Dhoti (jari kinar) (80s × 80s)	C. P. & Berar	(c)63·6	..	11·4	25·0
Sari (80s × 80s)	Madras	35·0	..	18·0	47·0
Sari (coloured) (80s × 80s)	Madras (Madura)	35·3	18·6	17·8	28·3
Sari (coloured) (80s × 80s)	Madras (Guntur)	63·3	3·6	3·1	30·0
Dhoti (80s × 80s)	Madras	55·3	2·0	11·7	30·0
Dhoti (120s × 110s)	Bengal	31·6	5·3	7·3	55·8

(*a*) The warp is prepared by the weaver himself.
(*b*) Only sizing included, other processes done by the weaver himself.
(*c*) Includes cost of *jari*.

Yarn is by far the largest factor entering into the costs of production. The cost of silk, artificial silk or *jari*, and dyeing charges are the other items entering into costs. The labour cost includes preparation as well as weaving. It is necessary to take into account how much is paid on preparatory charges before we can have any idea of what the weaver actually gets. From the table above we find that the preparatory charges are anything up to 20 per cent of the total cost of production. Though these charges are included under labour cost they are not necessarily earned by the weaver. But, as a rule, the preparatory processes are performed by the weaver himself helped by his family. Especially in the centres of professional weavers, warping and sizing are carried on by the weavers themselves on a co-operative basis, the neighbours helping one another even as they do when thatching houses or celebrating feasts. In certain urban centres in Madras and Bengal, however, sized warps are given to the weaver instead of yarn. Again, in places like Madura, Salem, Coimbatore, Nagpur, etc., there are mill-warpers who prepare warps at a charge, by using improved appliances. The weavers get their warps made by these mill-warpers. But in such cases the preparation charges do not constitute any large proportion of the total cost of production. We may, therefore, take it that generally

the labour charges, for weaving as well as preparation, are earned by the weaver and his family. Thus, the two main factors that enter into the cost of handloom fabrics are material and labour. In an unorganised industry like handloom weaving, the proportions of these factors cannot be expected to conform to any uniform standard. On the other hand, as may be seen from Table LVIII, these proportions vary from Province to Province (even from centre to centre), from one type of fabric to another, and from one range of counts to another. Some general trends in these variations may, however, be indicated. For plain fabrics, as may be expected, the proportion of labour cost is comparatively high. But, for fabrics with ornamental designs or borders such as artificial silk border, figured border, etc., the proportion for material is larger because the extra warp effects add to material cost. In Orissa, for example, in a plain dhoti of 40s counts 57 per cent of the cost is for material, while for a dhoti with figured border of 2/40s×14s counts, the cost of material is 67·7 per cent. Where *jari* is used for border or heading, the proportion for material is high. In Bengal a resam border sari of 80s involves a cost of 52 per cent for material; but for the same sari, with *jari* border, the cost for material is 68 per cent. The proportion for material is also greater for coloured fabrics than for grey goods. In Madras a grey sari of 80s costs 35 per cent for material, while the same, if coloured, costs from 54 to 67 per cent. Further, the proportion of labour cost is greater for some types of fabrics than for others. In Central Provinces and Berar, for a sari and a dhoti of the same counts (70s) the labour costs are 51 and 47 per cent respectively. Again, it may be said that the higher the counts the greater is the proportion of labour cost to total cost. Unless we take the same type of fabric in different counts for the same centre, however, no correct conclusions can be drawn. The following figures for the cost proportions supplied by the Guntur District Weavers' Co-operative Society illustrate that for higher counts the percentage of labour cost involved is higher.

TABLE LIX.—*Statement showing proportions of various items in cost.*

Fabric.	Cost of material as a percentage of total cost.		Cost of labour as a percentage of total cost.	
	Yarn.	Other material.	Preparation.	Weaving.
Dhotis (20s×20s)	60·0	..	20·0	20·0
Dhotis (40s×40s)	63·5	1·9	11·9	22·7
Dhotis (60s×60s)	58·6	1·8	10·8	28·8
Dhotis (80s×80s)	55·3	2·0	11·7	31·0
Coloured saris (24s×24s) . .	79·7	1·6	7·0	11·7
Coloured saris (60s×60s) . .	64·8	3·0	8·1	24·1
Coloured saris (80s×80s) . .	63·3	3·6	3·1	30·0

CHAPTER VII.

The Marketing Organisation.

117. *The commercial nature of handloom production.*—The problem of marketing of handloom products is intricately mixed up with those not only of the supply of yarn but also with those of finance, and it is difficult to deal with it separately. However, we have already dealt with these allied questions elsewhere in this Report. From a survey of the position of marketing obtaining in different Provinces and States, we may state that, barring some minor differences as regards the type of system prevailing in some areas the problems of marketing are almost the same everywhere. So far as the foreign trade in handloom products is concerned, however, some peculiarities arise which will be discussed at a later stage in this Chapter. An important point to be borne in mind is that it is incorrect to imagine that handloom production in India is largely meant for domestic consumption in the rural areas, as is often suggested by some people. Barring one or two Provinces, like Assam and the Punjab, the domestic consumption of handloom products, *i.e.*, consumption by the weaver himself is very small and in some cases, insignificant. In the following table we briefly summarize the information supplied to us by some of the Provincial and State Governments in relation to the percentage shares of the total handloom production corresponding to the three main uses for which it is intended, *viz.*, domestic use, sale in the Indian market and export.

TABLE LX.—*Proportions of handloom production sold in different markets, as percentage of total.*

Province or State.	Home use.	Sale in the Indian market.	Export.
	Per cent.	Per cent.	Per cent.
Assam	80	20	*Nil*
Bihar	5	95	*Nil*
C. P. & Berar	3	97	*Nil*
Madras	5 to 10	80 to 90	5 to 10
Orissa	5	95	*Nil*
Punjab	50	35	15
Sind	20	70	10
U. P.	1	94	5
Baroda	34	65	1
Cochin	*Nil*	100	*Nil*
Hyderabad	10	85	5
Indore	*Nil*	100	*Nil*
Kolhapur and the Deccan States	1 to 25	75 to 99	*Nil*
Mysore	*Nil*	100	*Nil*

It will appear from the above table that practically everywhere, except in the Provinces of Assam and the Punjab, and in Baroda State, a very large proportion of the handloom products is meant for sale in the market, whether this is local, inter-provincial or foreign. The conditions prevailing in Assam are, as explained elsewhere, somewhat peculiar, while in the Punjab coarse cloth is woven for domestic use in the villages. But in a large majority of Provinces and States, production is meant for sale.

118. *Agencies of marketing.*—It may also be said that the agencies of marketing, besides being diverse, are also far too numerous to leave much margin of earnings for the weaver. If we compare the position of the mill industry in this respect, we shall understand how the handloom weaver is seriously handicapped in the sale of his goods. This diversity of the marketing agencies chiefly arises from the unorganised condition of the industry itself. Thus, the independent weaver may sell his products either direct to the consumer, or to the *mahajan* and other intermediaries, prior to their sale to the final consumer. If the weaver is bound by any contractual relationship with the middleman, he is, of course, to that extent relieved of his responsibility for marketing the cloth, but in this case the *sowcar-weaver* or the *mahajan* will be called upon to seek the assistance of wholesalers or retailers in the rural or urban areas. The wholesaler, again may pass on the goods to retailers and petty shopkeepers in the final market.

Further, we have to consider the degree of dependence of the weaver upon these marketing agencies for the sale of his cloth. We have been at some pains to investigate this question and the general conclusion at which we have arrived is that, in most places, he is at the mercy of the cloth dealer. Even an independent weaver is not always able to dispose of his products directly to the consumer in the retail market, and he has to resort to the cloth dealer, who generally charges a substantial commission for retailing the cloth. The case of the weaver who works for a *sowcar-weaver* or *mahajan* is definitely worse. In the first place, he is probably indebted to the latter and is dependent upon him for his day-to-day livelihood. Secondly, his staying-power is hopelessly poor and he is not in a position to hold on even for a few days. His problem is not merely how to dispose of his cloth, but also to obtain further raw material in the shape of yarn for the next day's work, and, all the while he must also worry about the provision of food for his family. Thus, if he is an independent weaver, he resorts to *gujari* sale, and wanders from shop to shop offering his goods and finally selling them off at any price that can be obtained. The weaver-labourer too has to accept whatever terms are offered by the *sowcar-weaver* for fear of having to face starvation in the event of his refusal to accept a low offer. Sometimes the weaver can go in for borrowing further yarn on his own credit for the next day's work, but thus he may be only postponing his difficulties. If the situation does not improve he has to sell his products at low prices all the same. Apart from this interconnection between his family's food supply and the sale of his cloth, the weaver has to face all the irregularities of a typical Indian bazaar. Thus, in certain centres like Salem, Conjeevaram, Benares and Burhanpur, the weaver will be daily visiting the market where there are only a few *mahajans* or shopkeepers and hundreds of other weavers like him. In such a market, higgling goes on unabated, and the shopkeepers, generally with tacit agreement with one another, reject cloth after cloth for one reason or another. In some of these centres, the utter dependence of the handloom weaver upon the *mahajan* and the cloth-dealer has become a deplorable fact. In Chapter IV, we have described the mahajani and *sowcar-weaver* systems of production in some detail, incidentally touching upon the marketing side. As the three sides of the mahajan's business, *viz.*, yarn supply, credit and marketing are essentially unified, it would be unnecessary repetition to dwell on them here again.

119. *The weekly fair, shandy, or hat.*—We shall now describe the principal types of markets through which handloom products are disposed of in various parts of the country. The principal type prevailing in the rural as well as urban areas is the *shandy, hat,* or weekly fair. These weekly fairs are generally a mixed-up affair, in which not only handloom products but also mill cloths as well as numerous other commodities, mainly the daily necessaries of life, are marketed. Sometimes these fairs are also by-weekly and rarely tri-weekly. To these fairs the handloom weaver pays a regular visit both for selling his products as also for buying yarn and other raw materials and his daily necessaries of life. In these *shandies* and *hats,* retail sale for cash is the rule, and there is a considerable amount of higgling prior to purchase. Sometimes, however, the prices are also fixed at a customary level and are not unduly altered, unless there is a seasonal demand on account of festivals or marriages. In the smaller *shandies* or *hats,* handloom products predominate, while in the bigger ones mill cloth seems to command a greater sale. The principal types of cloth sold in these small weekly fairs are those which are used by the village consumer, such as *garhas, khadi,* coarse *motia* cloth, *kheses,* coarse saris or *lugaris,* coarse dhotis, blankets, *gamchas, lungis,* etc. Another feature to be noted is that the purchaser in these weekly fairs is generally the consumer himself who has gone there for purchasing his daily requirements. Apart from the final consumer, however, sometimes petty merchants also visit the small *shandies* to buy handloom cloth. In the big *haws* and *shandies,* the bigger merchants buy handloom products. In such big *shandies* and *hats,* the weekly transactions run into thousands of rupees. Such are the big *hats* of Bengal, *e.g.,* the Howrah *Hat,* the Kumarkhali *Hat,* Baburhat, and the Pollachi fair of Madras. Such *hats* and shandies appear to be the clearing centres for cloth produced in a number of neighbouring handloom centres. Such *hats* are run on a more organised basis in Bengal. There are many *hats* like the Baburhat (Madhobdi), Howrah *Hat,* and Kumarkhali *Hat,* which are exclusively confined to buying and selling of cloth. The special feature of the Howrah *Hat* is that the stalls are owned by the *paikars* or mahajans from the producing centres. Very few weavers visit this *hat.* The village weavers dispose of their goods to the local mahajans who, in their turn, take the goods to their stalls at the Howrah *Hat.* The wholesale dealers and the local shopkeepers, who visit this *hat,* ordinarily buy on credit from the paikars and the account is settled, once in three months. Another special feature is that dhotis and saris are generally bought in a grey state from this *hat,* and are subsequently bleached (dhobi-bleached) by the shopkeepers themselves.

Apart from the periodical fairs described above there are also special fairs and exhibitions held during important local festivals, where all kinds of handloom products are offered for sale to those visiting such fairs and exhibitions. Such are the Varadarajaswami Festival of Conjeevaram, the Chitra Festival of Madura, the Magh Mela of Allahabad, the Park Fair Exhibition of Madras, etc. In such fairs, however, the sale of cloth is mostly confined to the consumers only.

120. *The regular market.*—In addition to the above two types, there are also regular markets in large as well as small towns, which are known as *sattis, penths,* or bazaars. Here there are regular shops or middlemen's depots where the handloom weaver can sell his products practically everyday. He may sell the cloth either directly to the merchants or through a *dalal.* The

transactions are generally for cash, unless there is a standing relationship between the dealer and the weaver on a "give-yarn and take-cloth" basis. These merchants purchase cloth from the weavers in both slack and busy seasons and dispose of it during the busy season. The weavers have to sell at prices dictated by the dealers, as their bargaining power is very weak and there is no agency to give accommodation to them while the output is waiting to be marketed. In some places, especially in the United Provinces, the retail shopkeepers buy from *sattiwalas* or wholesalers at important centres or from their commission agents. The retailers also take goods of others on commission basis for sale. The wholesale dealers, on their part, buy either directly from the weavers or through middlemen and stock large quantities of handloom goods in their godowns for subsequent sale in the local as well as inter-provincial markets. Such wholesale dealing takes place in some of the biggest handloom cloth markets in India, such as Baburhat, Howrah Hat, Dacca, Madura, Salem, Coimbatore, Sholapur, etc.

121. *Other agencies of marketing.*—There are several other marketing agencies which are engaged in the handloom cloth trade. Thus the pedlar of Handloom cloth, who is a common sight in the small towns, does a considerable amount of selling business on his own. He buys directly from the weaver and sells directly to the consumer, generally for cash but sometimes on credit also in the case of accredited customers. Then there are various classes of professional money-lenders, who combine money-lending business with the sale of a number of articles including handloom cloth and sundry necessaries of life. These money-lenders no doubt exploit the needy condition of the consumer. It would be a desirable reform, if in the labour centres this agency of marketing handloom cloth is replaced by a more suitable one, such as instalment credit shops, run by co-operative societies. A special type of this money-lender dealer is the *Arumasakadan-karan* (*i.e.*, six months' creditor) of South India. These are rural retailers who sell cloth and other articles on six months' credit, and collect their debts afterwards generally in the form of grain. The needy villagers buy cloth generally at high prices for special occasions such as marriages and festivals and pay off the debts afterwards. Here also, the moneylender takes advantage of the poverty and ignorance of the consumer and gets fancy prices for his wares. In addition to the above agencies, in some of the South Indian towns, the auction system has become popular in recent years. Similarly, in some of the big towns clearance sales are a new feature in the cloth market.

Besides the above agencies, there are several other new ones created by the Governments or by private institutions. Under this category we may include the co-operative societies which have their own shops in important markets for the disposal of piecegoods produced under their auspices. The part played by co-operative socities in the re-organisation of the handloom industry will be discussed in Chapter IX. On the other hand, some of the Government emporia, such as those at Lucknow, Amritsar, Bombay, Nagpur, Hyderabad, Gulzaribagh (Patna) and Government museums at Madras, Calcutta and several others, seem to have succeeded somewhat better. Besides their ordinary function of marketing, they have also rendered considerable service to the handloom industry by way of advertising and propaganda and have popularised the use of handloom products among the higher classes. Similarly, the All-India Spinners' Association and allied bodies have rendered

assistance in marketing by means of cloth shops, called Khadi Bhandars. However, these have confined themselves to hand-spun and hand-woven cloth only, though their value as propaganda agencies in favour of the handloom industry as a whole is no doubt considerable.

122. *The cost of marketing and the weaver's margin of earning.*—There is no doubt that, on the whole, the present system of marketing of handloom products is a very costly one and that the high cost of marketing impinges upon the residual income of the weaver. The prices of handloom products are, in the ultimate analysis, fixed by the entire cloth market, and the pace of these prices is set to a large extent by the prices of mill-made piecegoods. Thus, to arrive at the residual income of the weaver, we have to deduct from the final price the cost of the raw material, the cost of preparation of the yarn for weaving, the interest charges directly or indirectly imposed by the middlemen, the cost of marketing including the middlemen's profits, transport charges, etc. From the weaver's point of view, again, we have also to consider the loss of time involved in disposing of the goods in the markets. Where the weaver is an independent weaver, he has to spend a day or two or even more in finding a purchaser for his goods. He may have to take a conveyance to the neighbouring market, such as a bullock cart, or a bus, or a boat and pay for the fare both ways. If he is unsuccessful in disposing of his goods, he may have to repeat this more than once. Where, however, the weaver is working on a wage basis for a master-weaver, no such question arises, because he is relieved of the responsibility of selling the products, though even in that case the wage received by him is a residue arrived at by the master-weaver after deducting these several items of costs. There is no doubt that the weaver bears the burden of any depression in the trade and consequent fall in prices. It is to be noted that the competitive position of the handloom industry is seriously affected by the fact that the marketing cost is far more heavy in the case of its products than in that of mill-made goods. A comparative idea of the great facility with which mill products are marketed can be had if we describe the main types of the marketing organisation of the mills. The mills have two principal systems for the marketing of their products, *viz.*, (1) the selling agency system and (2) the direct sale system. Under the selling agency system, a firm is appointed as the selling agent of the mill. The firm has to guarantee the solvency of the purchasers of the goods and to arrange for a monthly minimum sale of goods. It must collect offers from the wholesale dealers and submit them to the mill, and must also be responsible for the payment of the price. Under the direct sale system, on the other hand, mills open shops at important centres for the sale of cloth, both retail as well as wholesale. Cloth is usually manufactured against forward contracts entered into between the purchasers and the representatives of the mills. Even apart from this, the selling departments of the mills attempt to push the sales during slack season so as to keep the mills running. Owing to the huge scale of operations, the mills are in a position to effect large sales on the basis of a small commission of about 2 to 4 per cent. On the other hand, the commission charged by the middlemen, in the case of the handloom industry is very much higher, ranging from 10 to 100 per cent as will appear from the following particulars. Thus, the Director of Industries, United Provinces states, "in fancy articles like Benarsi saris, profits vary up to one hundred per cent because the sales are not brisk. Cheap saris yield only 15 per cent while those costing above Rs. 50 yield a higher gross profit."

The following table (Table LXI) illustrates the extent to which the middleman's profit margin inflates the final price of handloom fabrics :—

TABLE LXI.—*Statement showing middleman's profits on certain staple fabrics.**

Province or State.	Article.	Cost of the cloth to the middleman. (In annas.)	Price realised by the middleman. (In annas.)	Percentage of middleman's receipt.
Bengal	Sari	48	52	8·3
	Dhoti	16·75	18·25	9
	Lungi	5·5	7	27·3
Bombay	Bijapur Sari	39	41	5·1
	Ilkal Sari	74	78	5·1
	Khans	101	108	6·9
C. P. & Berar	*Vari*-border sari	200	224	12
	Kinar border dhoti	54	61	13
Madras	Saris	48	52	8·3
	Dhotis	20	22	10
	Shirtings	251·25	258	2·7
Orissa	Saris	29·25	33	12·8
	Dhoti	17·75	19·75	11·3
	Lungi	12·25	13·75	12·2
Punjab	Lungi	21	22·5	7·1
	Sufi	113·3	136	20
	Khes	90·75	101·75	12·1
Sind	*Susi*	76	80	5·3
U. P.	*Garha*	31·25	34·38	10
	Shirting	48	60	25
Baroda	Scarf	14	15	7·1
Cochin	*Thorthus*	2·75	3	9·1
Hyderabad	Cotton sari	21·8	32	46·6
	Silk sari	243·75	288	18·1
Kolhapur and the Deccan States.	*Khans*	40	45	12·5

* See Appendix XXXI.

123. *The Inter-provincial market.*—The inter-provincial market for handloom fabrics has been of great importance to the industry from the very beginning. Even when transport facilities were unsatisfactory, handloom fabrics used to be sold in distant markets throughout India, and the popularity of speciality products like Dacca muslins, Benares brocades and such other goods, was very great. This popularity had dwindled till a few years ago owing to the competition of cheap foreign and Indian mill-made imitations of quality goods and the inter-provincial market for the industry had considerably contracted. In recent years, however, owing to the unifying influence of the sari and the efforts of the various Departments of Industries of Provinces and States, the inter-provincial market appears to have been partially revived. The various Government emporia and museums are doing excellent work in popularising the consumption of handloom fabrics in this market; but the

difficulties in their way are still very great. The most serious obstacle in the development of this market appears to be : firstly, lack of adequate transport facilities ; and secondly, lack of proper publicity and propaganda. The consumers in the inter-provincial market mostly belong to the richer and middle classes, who have developed a taste for variety and artistic design. The modern Indian woman prefers to have a ward robe containing saris and other fabrics drawn from various centres of the handloom industry. The principal handloom fabrics sold in the inter-provincial markets are saris, silk brocades, lungis, muslins, table linen, upholstery, carpets and durries. The principal centres which cater for this market are Dacca, Murshidabad, Aurangabad, Burhanpur, Berhampore, Benares, Tanda, Lucknow, Patna, Amritsar, Ludhiana, Ilkal, Surat, Maheswar, Chanderi, Bangalore, Dharmavaram, Pedana, Musulipatam, Madura, Coimbatore, Salem and Calicut. The list is not exhaustive, and there are numerous other big as well as small centres which also are in a position to send their products to the neighbouring Provinces and States through the medium of the great *hats* and *shandies*, of which mention has already been made. It will appear from the above list that the centres included in it are both old and new, some of them going back to a hoary antiquity, while some are of recent growth. The inter-provincial market will be of greater and greater significance to the future of the handloom industry, and we feel that efforts will have to be directed to its extensive as well as intensive development in the interests of the industry.

124. *Some problems of internal marketing: The middleman's profit.*— From the foregoing survey of the internal markets of the handloom industry, the main conclusion that emerges is that the cost of marketing the handloom fabrics is prohibitively high. The principal problem, therefore, so far as marketing is concerned is how to reduce these marketing costs. It may appear that the middleman is largely to be blamed for the high cost of marketing. We are not sure, however, that in every case the middleman is reaping huge profits at the expense of the weaver. The condition especially of the middleman in many places is quite unsatisfactory, if only less so than that of the weaver himself. Where it is a *yejman* or *mahajan*, taking a paternal interest in the welfare of the weavers, his fortunes must sink or swim with those of the weavers. In many places the weavers are hopelessly indebted to such *yejmans* or *mahajans*, and, as there is hardly any hope of repayment, the position of the middleman is as precarious as that of the protégés. Where, however, the middleman combines other occupations with his own, such as money-lending, shopkeeping, etc., and is not directly responsible for the support of the weavers in any way, his position is much better. Similarly, the big merchants of the *hats* and *shandies*, dealing with outside market and free from any commitments in the industry, are also doing well. The average middleman, therefore, does not earn so much that transference of profits from him to the weavers would increase the *per capita* earnings of the weaver to any great extent. It appears, further, that there are far too many middlemen participating in the trade, and that their efficiency and individual turnover are much lower than they should be. At the same time, there are many middlemen who appear to be keeping their heads above water by taking a proportionately higher share of the gross profits of the industry than the weaver himself. Any reform of marketing, therefore, will have to take this fact into account. The middleman, of course, cannot be abolished, but something can be done to in-

crease his efficiency and turnover and to reduce his marketing charges per unit of cloth sold. This can perhaps be done by pooling the resources of the middlemen into a large-scale organisation for marketing, under the auspices of a sellers' co-operative society. If some such reform can be undertaken, it may lead to a substantial decrease in the cost of marketing.

125. *Difficulties of transport.*—Another very important cause of the high costs of marketing of handloom products, as compared to those of mill products, is the difficulties of transport which the weavers have to face. In the course of our tours, as well as in the official evidence, there were serious complaints made about the lack of adequate transport facilities, especially in the case of railways. From a survey of these difficulties, it appears that the handicaps from which the handloom industry suffers in this respect are practically the same everywhere. The main complaint has been that the railway freights are, for various reasons, considerably higher in the case of handloom goods than in that of mill products. The Registrar of Co-operative Societies, Madras, in his reply to our questionnaire, observes: "Handloom weavers have to pay railway freight twice,—once for getting yarn from the mills or yarn dealers and a second time for carrying the manufactured goods from the weaving centre to the consumers. Further, the present rates of railway freight for handloom goods are high and require considerable reduction. Railways classify mill goods under class F, while handloom goods are classed under A, and special concessions are shown to the former. While the parcel rate from Ahmedabad to Madras is Rs. 9 and the goods rate about Rs. 5, the railways charge a concessional rate of Rs. 2-2-0 inclusive of terminals for mill goods. It is quite necessary that the same special concession should be shown to handloom goods also. Railways should reduce the unit of concession from a bale to a bundle so that ordinary weavers may also be benefited by the concessional rates. Handloom weavers are not able to avail themselves of the concession for the use of hook-iron packing in transporting goods as the mills do on account of their large-scale production. It is also reported that the fine fabrics produced on handlooms are sometimes damaged by exposure to sun and rain in the railway yards." The Southern Indian Chamber of Commerce have also, in their evidence, emphasized the existence of their transport difficulties, on similar lines. Another way in which differential rates arise for the two industries is illustrated by the example quoted by the Government of the Punjab, who state that two different rates are applicable to the in-coming and out-going traffic of textile goods, at Amritsar, which is the chief market for handloom products in the Punjab. The following figures show that reduced rates are available from ports and other towns to Amritsar, while no such concessions are given to export of goods from Amritsar.

TABLE LXII.—*Differential railway rates on cloth and yarn at Amritsar.*

Between	In-coming traffic rate per maund.	Out-going traffic, rate per maund.
	Rs. a. p.	Rs. a. p.
Amritsar and Karachi	2 9 5	2 12 8
Amritsar and Bombay	2 15 0	3 3 9
Amritsar and Cawnpore	1 7 4	1 15 4

The Punjab Government state that these differential rates act to the disadvantage of the handloom weaver. They further point out that uniform scales of rates of freight on cloth and yarn militate against the principle that the rates on raw materials should be less than those on finished goods. They also point out that the rates are fixed by weight and handloom products are generally heavier but cheaper in price, as compared to the mill products, and hence the proportion of transport cost to the total cost is large in the case of handloom products. The Director of Industries, United Provinces, mentions the fact that the railways have special station-to-station rates for mill products and that this is a very great handicap from which the handloom industry suffers. Similarly, the Director of Industries, Bihar, cites another instance, wherein the rates for mills from Bombay to Calcutta (1,349 miles) is Rs. 1-1-0 per maund only, while the rate from Patna to Calcutta (338 miles) is Re. 0-13-0 per maund and that it is the latter rate which is of significance to the weavers in Bihar.

Apart from differential rates, another complaint is that the concessional freight rates cannot be enjoyed by the handloom products, as they are transported in an unpressed condition. Thus, as the Director of Industries, Orissa, points out, under railway classifications unpressed cloth is charged under clause VI-A at railway risk at Rs. 1-4-1 per maund and at owners' risk at Rs. 1-10-1 per maund respectively, between Cuttack and Shalimar, while pressed cloth for the same distance is charged under clause IV-A at railway risk at Re. 0-15-0 per maund and at owners' risk at Re. 0-14-5 per maund respectively. The difference between the rates charged on machine-pressed, hook-iron packed bales and on half pressed or *kutcha* bales is as much as 30 per cent, *i.e.*, the charge on the latter is higher to that extent. If the railways would charge freights on handloom products as those charged for machine-pressed bales of mill products, and also if the railways would reduce the units of concession from a bale to a bundle, it would benefit the handloom industry substantially. The railways might also consider the possibility of taking better care of handloom products while they are in transit or in the railway yard, and prevent them from being damaged by exposure to sun and rain. Another difficulty mentioned by the Director of Industries, United Provinces, is that the weavers are seldom able to realise rebate on unsold goods because the procedure is troublesome and causes considerable waste of time, and consequently they are forced to sell to the middlemen at lower prices instead of effecting a direct sale outside at higher prices. Another serious complaint brought to our notice by him is regarding the unauthorised payment which the weavers are forced to pay to booking clerks and other petty officials at railway stations in order to release their supplies of yarn and for booking further consignments. Finally, a considerable handicap arises from the terminal taxes and octrois which weavers and others have to pay on several occasions, *e.g.*, octrois for passing the barriers of certain towns and cities for selling cloth, the octrois on yarn and dyes, bazar taxes collected in the weekly market, etc. In some cases the Provincial Governments have helped to remove the handicap of octroi duties, but owing to the opposition of the Local Boards and municipalities they have not wholly succeeded. Recently, in some places *khaddar* or hand-spun and hand-woven products were thus exempted. Many of the above difficulties do not arise in the case of the mill products, at least to the same extent as in that of handloom fabrics. It is also obvious that there is pyramiding from

the view-point of the handloom weaver who has to pay these taxes both on the raw materials and on the finished products.

126. *Standardization of handloom products.*—One of the most serious handicaps in the marketing of handloom goods is the lack of standardization in the industry. Owing to this, it is not possible for out-station merchants to place their orders with the weavers or master-weavers and there is much waste caused by cut-throat competition between the weavers with the consequence that the prestige of the handloom industry suffers. In this connection we may refer to the United Provinces Report on the Handloom Weaving Industry (1935) which observes: "Much useful work can also be done by organising the existing *dalals* and *arhatias* so as to standardise production and to market goods according to fixed and stamped qualities. This will remove the cut-throat competition and will enable the out-station buyers to do good wholesale business according to certified qualities. In the official Report by a Special Officer on the Survey of the Handloom Industry in the Travancore State, which was kindly placed at our disposal by the Director of Industries, Travancore, a similar view is expressed. The Special Officer states: "All the important wholesale dealers in various parts of the State consulted by me on the subject have unhesitatingly told me that if standard goods of the above descriptions are regularly supplied to them they will be able to do good business in this line. The problem therefore resolves itself to this: if the industry could be organised in a manner that will ensure manufacture of standard articles maintaining a distinct quality, known and approved of, and if quantities large enough to replace the imported mill and handloom goods, can be placed in the market, then the wholesale merchants now dealing in the textile goods in the big centres will gladly take up the sale." We cannot see how this question of standardization can be left to the weavers themselves. In our opinion, this is definitely a matter for an official agency like the Departments of Industries or Co-operation to undertake. As, Mr. K. S. Venkataraman in his monograph on the *Handloom Industry in South India*, points out, moreover, the cost of standardization is not at all prohibitive, and "the absence of standardization often results in higgling prices, more salesmen, slow turnover, high costs, and low profits." It need not be emphasised that standardization of prices and quality is a particular necessity in the case of fabrics intended for the inter-provincial and foreign markets, for they must pass through a number of hands before they reach the final consumer.

127. *Publicity and propaganda.*—While all possible steps must be taken for reducing the costs of marketing, we feel at the same time that active steps must be taken for developing the market for the handloom industry both within the country and abroad by means of publicity and propaganda. In these days of changing fashions and intense mill competition, the need for intelligent propaganda, through special agencies created for that purpose, on the one hand, and the dissemination of useful information regarding the changing conditions in internal and foreign markets amongst the weavers, on the other, are highly essential. To leave such a large industry, employing millions of weavers, to the chances of supply and demand or to the caprices of unintelligent and greedy middlemen would be a wrong and disastrous policy. The existing agencies of publicity, such as the *hats* and *shandies*, and the periodical fairs, are quite inadequate for this purpose. For the expansion of demand, there must be scientific propaganda throughout the country carried

on by agencies specially created for that purpose. There is an enormous potential demand for handloom products, especially amongst the higher classes in India, which has not yet been properly tapped by the industry. Luckily for the handloom industry, the upper and middle classes in India have been developing a taste for the special types of handloom fabrics, which are not only best produced by handlooms but are also cheaper and more durable than the corresponding products of mills. There is a great and growing demand for table linen, upholstery cloth, fancy saris, etc., amongst these people which needs to be further cultivated. If, as some fear, in the distant future the handloom industry is going to be left with the market for such speciality products, it stands to reason that this market must be exploited to an increasing extent by those interested in the progress of the industry. Both by written word, including advertisements, circular letters, wall posters, catalogues, and journals devoted to handloom styles, as well as by the spoken word, including lectures, sales talks and actual demonstrations, the scope of the market for handloom goods may be enlarged.

In this connection, the value of a large number of emporia and museums cannot be over-emphasised. The Bengal Industrial Survey Committee, in their Interim Report on Marketing of Cottage Industry Products, make some valuable proposals in this direction which deserve consideration. The Committee have proposed the establishment of a few buying and selling depots, as an experimental measure in selected centres for marketing handloom and other products. The Committee state that the primary need of the industry is to demonstrate to the cottage worker " beyond possibility of doubt that well-organised marketing schemes can be worked successfully to his advantage and that it is worth his while to participate in it." They further observe : " It is not our intention that these experimental depots should be regarded as the beginning of a vast scheme of Government-controlled marketing extending over the whole Province. In our opinion it is neither desirable nor practicable for Government to undertake the business of marketing cottage industry products in the Province. Their activities should be confined to the initial and directly experimental stage." We believe experimental depots of this type in selected areas will serve the double purpose of directly extending the market as also indirectly resulting in publicity in favour of the handloom products. Another proposal is that a band of educated young men might be trained as salesmen and deputed to selected centres to push the sale of handloom products by canvassing from door to door, receiving a commission on the sales effected in addition to a fixed minimum monthly allowance. It is within the scope of the activities of Co-operative Societies and Provincial and State Departments of Industry to adopt these measures, thus solving not only the problem of marketing of handloom products but incidentally, to some extent, that of unemployment among the educated classes.

128. *The export trade.*—The Indian handloom fabrics have a considerable export market in the countries of the African and Asian littorals. In this respect, again, it may be said to be a rival of the mill industry, because the latter also has a fairly big market in, more or less, the same countries. The principal countries to which handloom fabrics are exported are, Burma, Federated Malay States, the Straits Settlements, Ceylon, Siam, Zanzibar and Pemba, Sudan, Mauritius, Borneo, Java, Sumatra, Fiji Islands, the Union of South Africa, the United Kingdom, British West Africa and French West

Africa. In most of these countries, the consumers are largely Indian labourers who have settled there and have carried with them their tastes and habits of dress. There is also a considerable demand, especially for *lungis* and sarongs among the local people in the far eastern countries. In the case of West Africa, however, the Madras handkerchiefs have had for long a special class of consumers amongst the Negro inhabitants. So far as the United Kingdom is concerned, on the other hand, the market is an *entrepot* market in view of the fact that the exported cloth is mostly re-exported by firms in Manchester to West Africa. The following table indicates the relative size of the market for lungis, and saris, and Madras handkerchiefs and shawls during the year 1938-39 :—

TABLE LXIII.*—*The principal export markets for handloom products and the quantity of cloth exported to each.*

Destination.	Handkerchiefs and shawls (in thousands) Numbers.	Lungis and saris (in thousand yds.)
Aden and Dependencies	44	879
Straits Settlements	..	4,430
Sieara Leone	86	..
Gold Coast	3	..
Nigeria	504	..
Union of South Africa	2	17
Ceylon	..	5,176
Burma	..	15,370
Federated Malay States	..	1,119
Zanzibar and Pemba	..	12
Kenya	..	33
Sudan	..	798
Mauritius	..	219
Fiji	..	26
Other British Possessions	21	47
France	1	..
French West Africa	4	..
Liberia	1	..
Arabia	..	18
Sumatra	..	38
Java	..	61
Siam (Thailand)	..	59
Other Foreign Countries	14	21
Total	680	28,323

*In the category "lungis and saris," lungis, which are mostly hand-made, predominate quantitatively, and saris are a much smaller item. The figures ar for 1938-39.

The above table indicates the export position as it stood immediately before the war. It must be noted, however, that owing to the war the export market has virtually collapsed, entailing a loss of crores of rupees to the handloom industry. We are afraid that only with great difficulty can the lost markets be captured by the industry after the war.

129. *The types of fabrics exported and their resources.*—The great bulk of the exports of handloom cloth takes place from the Madras Province, but considerable quantities are also exported from other Provinces and States, particularly Bihar, United Provinces, the Punjab, Sind, Bombay, Hyderabad and Baroda. The Madras Province exports the Madras handkerchiefs, sarongs, lungis, or kailis. Madras handkerchiefs and sarongs are produced chiefly in the area around Madras, *viz.*, Chingleput, Nellore, Chittoor, North Arocot and Guntur and exported to West Africa by a few exporting houses in Madras. Lungis and coloured sarongs produced in the districts of Tinnevelly, Trichinopoly, Tanjore, South Arcot, Chittor, Chingleput, Guntur, Nellore and North Arcot are exported to the Straits Settlement, Ceylon, Federated Malay States, Java, Sumatra, Borneo, etc. This trade is also in the hands of a few exporting houses which have a virtual monopoly of it. From Bihar, it is only the Government organisation, *viz.*, the Bihar Cottage Industries, Gulzaribagh (Patna), that exports furnishing fabrics, such as curtains, bed-spreads, table cloths and runners, to England, New Zealand and Australia. This organisation gets cloth woven by weavers in the villages through weavers societies and contractor weavers according to specifications and sends it to its agents in London and Auckland through the shipping and clearance agents in Calcutta. From the United Provinces silk cloths and brocades of Benares, carpets of Agra and Mirzapur, prints of Lucknow, Farrukhabad and furnishing fabrics produced by the United Provinces Handicrafts, Lucknow, are exported mainly to Europe and America. Except in the case of products of the United Provinces Handicrafts, the export trade is in the hands of big merchants who get work done at the manufacturing centres either in their own factories or by advancing raw materials to weavers working in their cottages. The Punjab exports *khaddar, susis, salaris, tehsilas, lachas,* silk *daryaees* and lungis to Afghanistan and trans-border areas, khaddar and *boseki* and other coarse cloths to Yarkand, check *lungis* and other fabrics of rayon fibres to Burma and China and table covers, teapoy covers, pillow covers, curtain sets and ladies' dress cloth to England and the United States. The cloth is exported by firms who have established business connection in the countries concerned. From Sind *susi* cloth only is exported mainly to Africa. The quantity of handloom fabrics exported from Bombay is inconsiderable and consists of mainly silk fabrics from Surat and saris from Sholapur, which are exported to Africa, Ceylon and Abyssinia. From Hyderabad State large quantities of lungis and printed goods are sent to Java, Sumatra, Arabia, Africa, Malaya, Dutch East Indies, and Burma while Baroda exports *patolas, mashrus* and *lungis* in small and irregular quantities.

130. *The extent of the export trade.*—The table below indicates the extent of the export trade in handloom fabrics. In the figures quoted by the Department of Commercial Intelligence and Statistics, the classification is for (*a*) "Madras handkerchiefs and shawls" in piece, and (*b*) lungis and saris. The exports of shawls, however, have become quite insignificant in recent years, and hence the figures given below may be said to show the volume of exports of Madras handkerchiefs mainly. Similarly, in 1938-39 out of the total exports of 28·3 million yards of lungis and saris, 26·6 million yards was the quantity of cloth exported from Madras. The entire Madras share may be safely as-

cribed to the handloom industry. In the light of these observations the following figures should be considered :—

TABLE LXIV.—*Exports of piecegoods (handloom and mill-made) from India.*

(In million yards.)

Year.	Madras Handkerchiefs and shawls (number in millions)		Lungis and saris		Total coloured.		Total piecegoods (mill-made and handloom).	
	Madras	All-India.	Madras.	All-India.	Madras.	All-India	Madras.	All-India.
1920-21 . .	2·0	2·6	20·5	21·9	29·5	90·2	30·7	146·4
1921-22 . .	0·4	0·9	27·8	29·7	32·7	135·7	33·1	161·0
1922-23 . .	1·8	2·3	25·0	26·7	34·3	124·8	35·0	157·0
1923-24 . .	2·6	3·1	30·1	38·2	37·3	130·0	38·2	165·3
1924-25 . .	3·4	3·9	31·5	34·5	37·2	136·2	37·9	181·5
1925-26 . .	2·9	3·2	31·5	33·4	43·3	126·5	44·0	164·8
1926-27 . .	1·4	1·5	31·5	33·0	46·0	175·9	47·0	197·4
1927-28 . .	3·3	3·6	25·9	28·9	42·4	149·3	43·2	168·6
1928-29 . .	3·0	3·2	26·1	28·4	41·0	131·4	41·7	149·2
1929-30 . .	4·8	4·0	25·7	27·0	40 5	117·2	41·3	133·4
1930-31 . .	2·6	2·8	19·2	20·8	32·2	87·5	32·6	97·7
1931-32 . .	3·5	3·6	15·1	16·5	29·5	95·8	29·8	104·6
1932-33 . .	5·1	5·1	13·6	15·3	24·2	61·4	24·4	66·4
1933-34 . .	3·5	3·5	5·6	7·3	20·0	52·0	20·1	56·5
1934-35 . .	1·3	1·3	6·6	7·8	21·3	50·8	21·6	57·7
1935-36 . .	0·8	0·8	10·3	11·3	21·9	61·1	22·2	71·3
1936-37 . .	1·2	1·2	13·9	16·1	29·8	73·8	30·1	101·6
1937-38* . .	1·4	1·4	27·2	29·3	53·6	135·2	57·5	241·3
1938-39* . .	0·6	0·6	26·6	28·3	46·1	98·2	48·0	177·0

*From 1937-38, exports to Burma are included in the figures, which to that extent have risen. Excluding Burma, figures for all-India are as under :—

Year.	Handkerchiefs, etc. (millions).	Lungis, etc. (million yds.).	Total Coloured, etc. (million yds.).	Total piecegoods, etc. (million yds.)
1937-38 . . .	1·4	17·9	95·9	147·3
1938-39 . . .	0·6	12·9	60·3	90·4

From the above table, it will appear that the exports of handloom cloth correspond to about from one-fourth to one-third of the total exports of cotton piecegoods from India. The export trade has experienced considerable fluctuations and especially in Madras handkerchiefs, the condition of the trade has been very unsatisfactory in recent years, while in regard to *lungis* also a number of difficulties have arisen, as will be shown in the next paragraph.

131. *Madras handkerchiefs.*—The export trade in Madras handkerchiefs has been a very valuable one and their manufacture gives empolyment to an important section of the handloom industry in the Madras Presidency. According to the Director of Industries, Madras, the approximate number of looms engaged in the weaving of these cloths can be estimated at about 10,000 on the basis of an average production of 60 yards per loom per month or 720 yards per year and the industry gives employment to nearly 40,000 people consisting of winders, warpers, sizers, dyers, weavers, middlemen and also those who attend to the sales side of the business.

The organisation of this section of the industry is somewhat peculiar. Firms dealing in Madras handkerchiefs generally employ designers for evolving new designs. None of the exporting houses carries on direct business with the weavers. Generally speaking, the exporting firms issue to the master-weavers, through the *dubashes*, sufficient yarn of the appropriate quality in

order to produce 64 pieces of real Madras handkerchiefs and the master-weavers are directly to deliver the goods in a specified time. During the slack season, the exporting houses rigorously insist upon a standard of quality and claim a small rebate from the master-weaver for delivering stuff of inferior quality. During the busy season, however, the exporters overlook slight defects in quality. The exporting houses do not provide any continuity of employment to the weavers for fear of accumulating stocks.

The export trade in Madras handkerchiefs goes back to the days of the East Indian Company. Previously public sales were held in London every three months, at which these handkerchiefs were sold by public auction. Latterly exporting firms in Madras entered into direct business relations with firms in London, Manchester, and Liverpool, and a large *entrepot* trade had developed for several years. In recent years, however, serious competition is being offered by imitation Madras handkerchiefs manufactured on power-looms in Europe, although it has been stated that the West Africans still favour the real stuff, both on account of its durability and its special taste and smell. The real Madras handkerchiefs are also produced in brilliant colours, which are not fast, but as they are not supposed to be washed at all, this does not matter. In spite of the superiority of the real handkerchiefs, however, it will appear from Table LXIV (*a*) below, that the *entrepot* trade of the United Kingdom has suffered considerable decline during the last decade. Thus, from a total of 3,413,000 pieces in the year 1924-25, the exports of the United Kingdom fell to 44,000 pieces in 1938-39. This may be due to two reasons. Partly it can be attributed to the fact that in recent years the direct trade with West Africa has somewhat increased. But as the total exports have actually dwindled, we think that the decline is to a greater extent the result of the new competition of power-loom manufacture which has arisen lately.

TABLE LXIV (*a*).—*Export of Madras handkerchiefs and shawls.*

(*In thousands*).

Year.	United Kingdom.	Total.
1910-11	1,941	2,042
1911-12	2,683	2,749
1912-13	1,795	1,903
1913-14	1,331	1,361
1920-21	2,002	2,223
1921-22	400	631
1922-23	1,804	1,936
1923-24	2,666	2,744
1924-25	3,413	3,532
1934-35	517	1,310
1935-36	355	801
1936-37	431	1,174
1937-38	488	1,386
1938-39	44	660

Another fact to be noted is that the export trade in Madras handkerchiefs has been monopolised by a few firms in Madras. The Director of Industries, Madras, states that this monopoly is due to the fact that the problem of the marketing of the Madras handkerchiefs requires careful study of the requirements of the customer and consumers in West Africa, and that a large capital is needed for organising the trade in India and West Africa. Until about 1927, the trade was exclusively in the hands of two European firms, having trade connections in both the United Kingdom and West Africa. From 1928 onwards, however, certain Indian concerns, including a weavers' co-operative society, have entered the Madras handkerchiefs trade and began to export direct to the British West Africa. This has led to severe competition amongst the European and Indian firms. The European firms have made efforts to retain their hold on the trade, and in this respect the English Patents and Designs Act as amended in 1932, seems to have helped them. Prior to 1932, non-manufacture of an article in England was one of the grounds on which the registration of a design might be cancelled. Under the new act, the only ground on which cancellation is possible is previous publication of the design in England. Under the Nigerian Ordinance Number 36 of 1936, reciprocity of treatment has been granted to English designs in Nigeria. Thus the Ordinance provides that "any design registered in the United Kingdom shall enjoy in Nigeria the like privilege and rights as though the certificate of registration in the United Kingdom had been issued with an extension to Nigeria". It is thus possible for any firm to get its design registered in England and make it effective in Nigeria, which is the principal consumer of Madras handkerchiefs, whether or not the article was produced in England. Accordingly, one of the European firms has begun to register some staple designs in this manner and has sucessfully instituted proceedings against Indian exporters in Nigeria. The position is thus described by the Registrar of Co-operative Societies in his reply to our questionnaire. "In regard to the export of Madras handkerchiefs, the present practice of registering in England by a European firm, under the English Patents and Designs Act, of designs on handloom cloth, with a view to secure exclusive rights in such designs in the markets of West Africa, is causing considerable hardship to the handloom weavers engaged in the manufacture of this variety. Weavers, without any knowledge of the patterns registered in England, manufacture handkerchiefs and, when these are exported to Nigeria (West Africa), the European firm, which has registered designs in England, files suits and obtains decrees restraining the sale of such cloth. In 1938-39, this firm successfully, instituted proceedings against the Indian exporters and prevented the sale of their goods to a certain extent. The Indian exporters, therefore, feel nervous about buying Madras handkerchiefs, as they are afraid that the moment their goods reach Nigeria, action would be taken to prevent the marketing of the goods. The matter is particularly difficult, as the Indian weaver or the merchant is not aware of the designs patented in England. On account of these difficulties, the weaver is often obliged to sell his goods only to the firms which has registered designs in England. This has practically resulted in a monopoly for the firm. Unless steps are taken to secure exemption for the designs on handloom cloth from the operation of the English Patents and Designs Act, the handloom weaver will not be in a position to obtain reasonable prices for the Madras handkerchiefs produced by him."

We are not concerned with either the legal or the controversial aspects of this matter, but we feel, that as a consequence of the long drawn-out struggle which is going on between the exporting firms, the Madras handkerchiefs business in the Province has been steadily declining. On the face of it, it looks strange that any firm or firms should be able to maintain any monopolistic position in regard to cloth produced in India and sold in another country by means of patent rights registered in a third country. We have seen thousands of designs of Madras handkerchiefs in the course of our investigations. It appears that a slight addition or subtraction of a single line or dot or square to a design changes it into a new one. There is such a close similarity between the various designs that the weavers engaged in this trade are naturally nervous as to the choice of any particular design, lest there should be infringement of any patent rights anywhere. What is more, it is possible for any firm to copy a design from Madras and get it registered in England so as to render it effective in Nigeria, as a *post-facto* affair and institute proceedings against those who may be using that design as a prior right. We are not in a position to ascertain whether any particular firm has been actually doing this or not, but we must emphasise the fact that the possibility is always there. This means that the patent law of England, newly amended and rendered effective in Nigeria by a reciprocity provision, is definitely detrimental to the interests of the industry. It has threatened the very existence of the whole industry and the market has changed from the Madras products to articles produced on a mass scale by power-looms in other countries. It has also led to the result that the exporters are in a position to refuse to place orders with the weavers, unless the entire rights in the designs are transferred to them, thereby preventing the weavers from disposing of their products to other exporters. Thus, the only remedy open to the Indian exporters appears to be to get their own designs registered in England prior to sale of goods in Nigeria. In the very nature of things, however, it is not possible for the Indian exporter to register his designs in England, for in that case he must have his own branch in London as well. Secondly, it will involve enormous expense to register these designs in England. Thirdly, as the designs do not last for more than six months owing to fashions changing fast in West Africa, it would not be worth the while of any weaver or Indian exporter to register them in England at considerable cost and labour. On the other hand, it is possible for anyone to register a few designs in England in an experimental way and prevent others, for fear of infringement, from entering into the field, thus securing a larger market by registering a small number of designs. Thus, it is clear that registration of designs in England has only a nuisance value and is of little commercial importance from the ordinary point of view. Unfortunately, West Africa is the only place in the world where Madras handkerchiefs are sold and used, and there is no internal market for them. Consequently, the weavers are at the mercy of the exporters and of rival interests in West Africa. It must be noted that even registration in India, under the Trade Marks Act, is of little use in this case, as the Indian registration is not effective in Nigeria, for the reason that India is not one of the countries of the "Industrial Group" of the British Empire. It has been suggested to us that the Government of India should consider whether it would be possible, by means of representations to His Majesty's Government, to get the British patent law so altered as to make registration of Madras handkerchiefs

impossible, or to persuade the authorities in Nigeria to exempt Madras handkerchiefs from the operation of the law relating to patents and designs. In any case, there is not a great deal of novelty or originality in the designs, and moreover, it is the weavers in Madras who are largely responsible for many of the designs and it is they who should benefit rather than the export traders. We feel, therefore, that the trade should be thrown open to free competition, so as to leave scope for the ingenuity and skill of the Indian weaver.

132. *Lungis or kailis.*— *Lungis* or *kailis* are the trade name for fabrics made from coloured warps and weft yarns. These fabrics are very popular among the Mahomedans (and recently also Hindus in some parts of India) who use them as dhotis and headwear. They are also cut up into dress material and used for blouses for Hindu women. The Director of Industries, Madras, states that the approximate number of looms engaged in the weaving of *lungis* is about 45,000 and that the industry affords subsistence to nearly 180,000 persons. There is a huge export trade in *lungis* from the Madras Province. It appears to have out-stripped the export trade in Madras handkerchiefs during the last four or five years. Japan is the principal competitor and has been exporting, since 1931, large quantities of power-loom-woven *lungis* at very low prices to the Straits Settlements and Ceylon, which are the biggest markets for these products. Unlike Madras handkerchiefs, *lungis* have an Indian as well as a foreign market, and consequently this industry is better stabilised than the other. Moreover, *lungis* are produced in many and scattered centres in the Madras Province, unlike Madras handkerchiefs which are produced in a few centres around Madras City. The leading firms in Madras who deal in them register their trade marks in India and employ designers to evolve new patterns. As in the case of Madras handkerchiefs, here also they deal with the weavers through *dubashes* and middlemen, supplying on credit the necessary quantity of yarns, etc. A serious difficulty has recently arisen owing to the national feeling in Burma against Indian *lungis* and the growing habit of Burmese women to weave in spare time their own requirements of these cloths. Secondly, Japanese competition, helped by exchange depreciation, has been very considerable till recently, in the Far East. Thirdly, there have been heavy taxes on textile goods imported into some of the principal markets for these products, which hinder the trade considerably. Owing to the superiority of its weaving qualities, however, the hand-woven *lungi* has a field of its own in the foreign market, which needs to be developed by means of propaganda and other measures.

133. *Other fabrics.*—As regards other fabrics, mentioned in a previous paragraph, similar difficulties are encountered by the export business. The Director of Industries, United Provinces, observes: "The goods are not certified by any conditioning house under State control or recognised association of merchants. The prices have, therefore, to be settled by negotiations in each case, except in the case of cheap prints of Farrukabad where the prices are more or less regulated and which are very popular in America for dresses and other things. The tariff regulations and import restrictions often work against imports of handloom products, because exporters are not always the people to answer questions satisfactorily. For example, the Ottawa Agreement gave preference to Empire and British products and in many cases Indian fabrics

did not get enough preference, because the raw material used was not always Indian or Empire production. This might have popularised the use of Indian silk, but the mills never bother about it."

134. *Regulation of the export trade necessary.*—Lack of publicity and propaganda in foreign countries appears to be a grave defect of the entire export trade in handloom products. There is no agency to safeguard the special interests of the handloom industry in the foreign market or to study any problems in relation to the export trade at present. The trade is left wholly to the mercy of extraneous forces. We feel that the entire system of the export trade in handloom fabrics will have to be properly organised, and in this connection it may be worth while to consider some of the suggestions placed before us by all witnesses and others. One suggestion is that the Government might regulate exports and license the exporters, who should be required to export goods according to approved specifications. Secondly, the services of the Indian Trade Commissioners and similar official agencies might be utilised to develop the various markets, by means of extensive propaganda, maintenance of museums of handloom products in the consuming centres, etc. Thirdly, arrangements might be made for providing credit facilities from banks and other agencies in foreign countries to the exporters of handloom products. Fourthly, arrangements might be made to standardize the local production so as to lend stability to the export trade.

CHAPTER VIII

Competition

135. *Divergent views.*—We have been asked, under our terms of reference, "to compare the nature of the products of the handloom industry in each area surveyed with the corresponding mill products and to find the nature of the competition between the two". Both from the written answers to our questionnaire and from our discussions with people in various places, we find that a difference of opinion exists regarding the question of competition between mills and handlooms in India. The handloom weavers throughout the country believe that their troubles are mainly due to mill competition. Wherever we went, bitter complaints were made to us by hand-weavers regarding encroachment by mills. The loudest complaints, perhaps, were heard in some of the centres of sari production like Santipur, Burhanpur, Ilkal, Sholapur, Guntur and Conjeevaram. The average weaver is so much obsessed by it that no other diagnosis of his troubles will appeal to him. It is also believed by many of them that much of this competition is unfair. Most of the Provincial and State Governments have also stated that severe competition has been going on between handlooms and mills and that encroachment has been made by mills on the handloom's preserves. According to these Governments, competition is going on over a wide range of products especially dhotis, saris of all counts, towels, chaddars, etc.; nor is all the competition on fair lines; cases of unfair competition are not rare. On the other hand, important organisations like the Millowners' Association, Bombay and Ahmedabad Millowners' Association deny the existence of competition between the mills and handlooms. The Millowners' Association, Bombay, assert that the mill and handloom industries are complementary rather than competitive, and they flatly deny the allegation that mills have encroached on any styles of goods produced by the handlooms. On the other hand, they claim that the handlooms themselves have encroached on the special field of the mills, and that they have used for this purpose the Government assistance given for it. It is also stated by them that the large expansion of mill production since 1925 has been at the expense of imports and not of the indigenous handweaving industry.

We have examined the contention on both sides with such data as are available to us. We fear that the divergence of views mentioned above is partly due to a difference in the definition of the term competition. We take the term competition as it is usually understood in economic parlance. When a demand is met by two or more similar or replaceable commodities, a state of competition is said to exist between them. In this broad sense, we doubt if anybody will deny the existence of competition between mills and handlooms. Perhaps the Millowners' Associations interpret competition in a more specialized sense. Mills make certain cloths to meet the orders received from their agents and dealers, and although it may be that some of those cloths compete with similar handloom cloths in the market, that aspect seldom enters into the calculation of the mills. After all, handlooms are too insignificant to be an object of deliberate competition by mills. That the cloths

coming from the two sources have been competing in the market is certain and needs no proof. Therefore, the contention that these two sections of the Indian textile industry are complementary is not tenable. The relationship was to a great extent complementary before 1925, but things have changed much since. Even now the two are complementary in a narrow field; but there is competition, both direct and indirect, over a wide range of counts and fabrics. During the last decade, the mills have increased their production of certain styles and types of fabrics traditionally associated with handlooms; the handlooms have also, in turn, tried to imitate certain styles which the mills had long adopted.

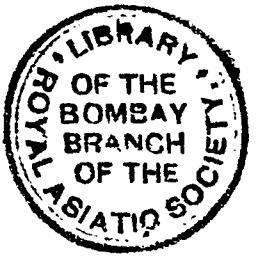
Even more untenable in some respects is the view held by many handloom weavers that all their ills are due to mill competition. The replacement of some of their fabrics was due more to change of fashions, and what the mills did was to produce something for which there was a growing demand. They had to meet a need which was widely felt in the country. Nor are the handweavers right in regarding all competition as unfair. Even in a world not so dominated by the *laissez-faire* ideal as in the 19th century, competition would be regarded as legitimate in business: each industry or section of industry will try to cater for human needs, and can legitimately use all reasonable means for pushing its products. But all means may not be fair. It is extremely difficult to draw a line between fair and unfair competition, but competition may be considered definitely to be *unfair*, if there is an intention on the part of one industry (i) to deceive customers by producing something which resembles the product of the other industry and is *intended* to pass off for the latter, and (ii) to undersell identical goods produced by the other by deliberate price-cutting with a view to capturing the market. Such unfair competition is not only injurious to the rivals but is also anti-social, and civilized governments take steps to discourage it. As will be shown presently, although there exists severe competition of the legitimate kind, unfair competition is not much in evidence and in certain cases, wherever some injury has resulted to handlooms, cloth-dealers rather than mills have been largely responsible.

136. *Growth of competition.*—Considering the nature and potentialities of the mill industry, it was but natural that its products should sooner or later come into competition with those of the handlooms. The various internal and external economies resulting from large-scale mechanical production enabled the mills to produce at a low unit cost, and it was inevitable that such cheap products should come into severe competition with the products of handloom weavers who depended on the mills for the raw material and on various types of exacting middlemen for finance and marketing. Such competition started as early as 1830 and made some progress during the last century, especially in men's garments, but owing to the undeveloped state of communication and the innate conservatism especially of the womenfolk, imported mill cloth did not make much headway immediately. Each of the major castes in the country had its own special styles of dress prescribed by immemorial custom and had its traditional suppliers in the neighbourhood or in the shandies nearby. Nor did the mills in India take up weaving seriously for long; they mostly confined themselves to spinning. Thus competition worked through beaten tracks for long.

But after 1925, all these circumstances changed, as has already been explained in Chapter I. The removal of the cotton excise duty gave a fillip to the mills, and the imposition of the high tariff wall against imported yarn and cloth enabled the mills to expand production extensively. About this time, important changes took place in the fashions and cloth requirements of the people, especially of the middle classes, and the mills adjusted their production more readily than the handlooms and reaped the consequent benefit. It was at such a juncture that the Congress ban against the use of imported yarn came, and the result was a positive discouragement of hand-woven saris of higher counts. Thanks to these and other favourable factors, mentioned in Chapter I, mills increased their production of high-count yarn and finer cloth. Thus having made provision for the supply of finer yarns and suitable designs, they proceeded to make high-class saris with up-to-date designs and attractive borders, and for this purpose, they introduced dobbies and jacquards. In this way, saris and dhotis suited for middle-class wear were made at attractive prices, which captured the fancy of the market and offered severe competition to hand-woven saris and dhotis.

Improved transport also helped the mills in successfully pushing their goods. Before the introduction of the railways and automobiles in the interior, the use of mill cloth was confined to cities and towns and the neighbouring rural areas. Especially in the backward interior parts, people went on using their traditional hand-woven cloths made with rough country-made yarn. But with the expansion of railways and motor buses, the cost of transport fell, the rural population saw the advantages of light and cheap clothing, and the new taste favoured the mills. It is true that the ease and low cost of transport benefited hand-weavers also to some extent, but their goods were not of the right quality nor were they adequate in quantity to receive the benefit of cheap transport. There were also other impediments as shown in Chapter VII. It is true that a few centres in Madras and Bengal adjusted their lines of production to suit changing fashions but most of the centres were not able to do so, owing to inherent economic difficulties.

It has been pointed out that the mills have had to face various unfavourable factors,—frequent strikes ; increase in wages ; various restrictions regarding conditions of employment, like the Factories Act, the Maternity Benefit Act, the Workmen's Compensation Act, etc., and increase of tax burdens, *e.g.*, license fees on sale of mill cloth (in Madras), octroi duties on mill cloth (in Mysore). etc. But it cannot be said that these obstacles seriously impeded the progress of the mills. Restrictions about hours of work were overcome by working double shift. No doubt the burdens of the mill industry have been expanding, but those have not fallen too heavily, thanks to growing profits from mass production. This country has every right to be gratified about the expansion of production in the mills ; they have accumulated the country's capital and have given employment to many hundred thousand workers, not to speak of the indirect employment which has resulted from this. Moreover for a large part if not the whole of the burden caused by the above factors, the mills have been more than compensated by the various protective measures adopted by the Government The growth of the mill industry was the result of some planning, and Government policy has had a share in it. The Tariff Board on Cotton Textile Industry of 1927 prescribed diversification as a remedy for the depression which was then passing over the Bombay mills.


LIBRARY
OF THE
BOMBAY
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OF THE
ROYAL ASIATIC SOCIETY

CHART III.

Consumption of Cotton Cloth in India (1900-39).

(*See* Appendix XXI.)

To face para. 137.

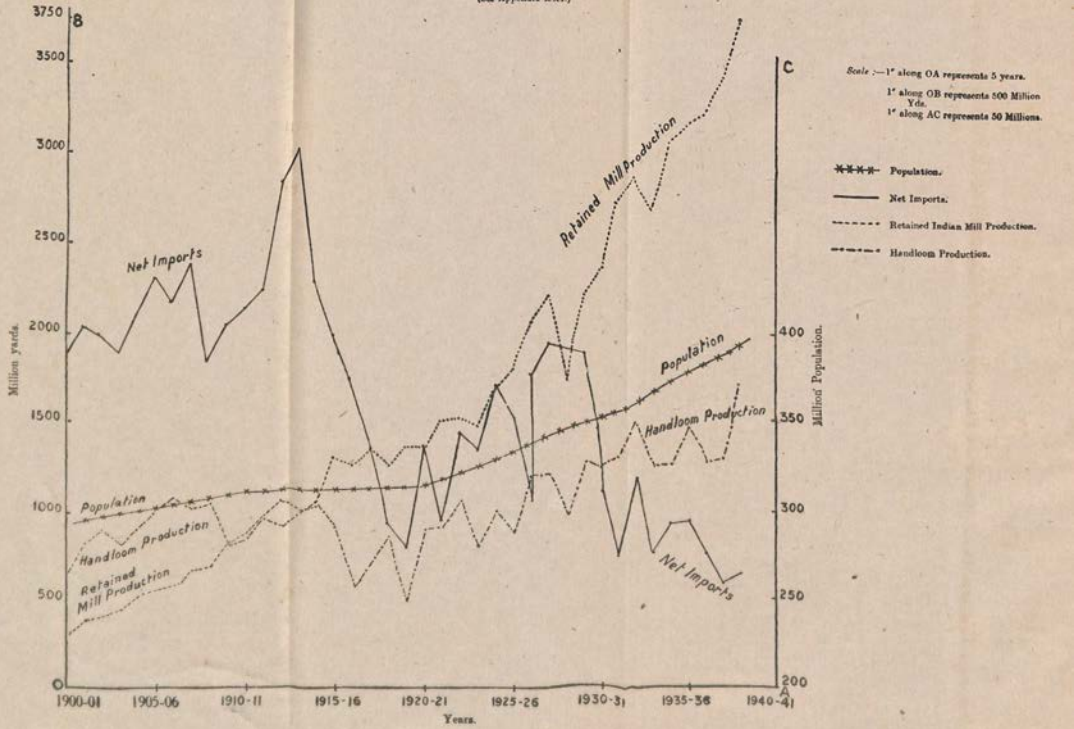
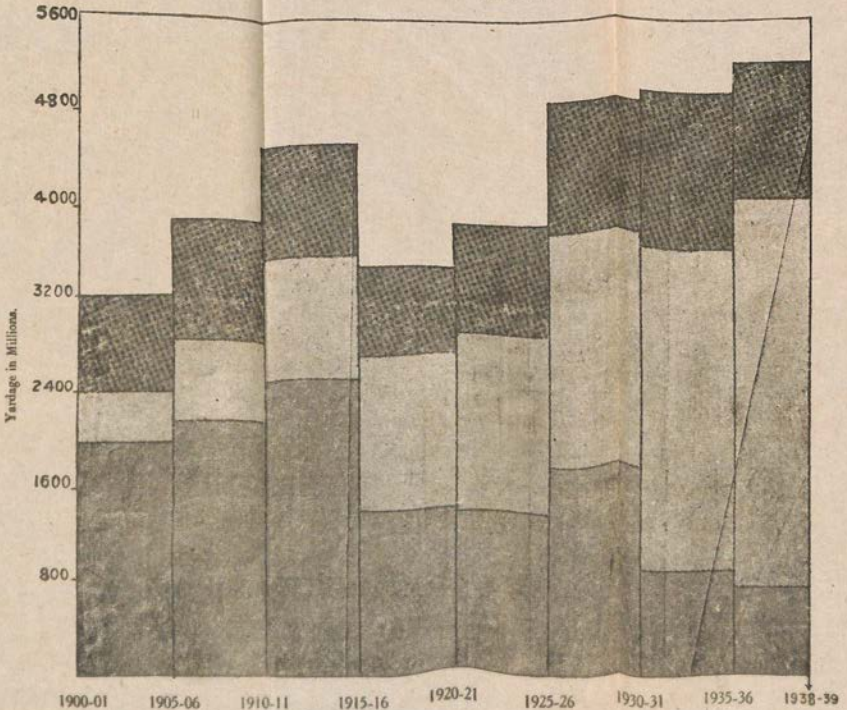


CHART IV.

Five-year averages of the annual consumption of Cotton Cloth in India.

(*See* Appendix XXI.)

To face para. 137.



It was pointed out that longcloth and shirtings formed too high a proportion of the total output, while dhotis and saris constituted only a small proportion. The mills in Bombay were also advised to produce goods of a higher quality, utilizing the advantages that that city possessed in respect of imports of American and African cotton. Thus what the mills did was to act up to the advice given to them. Therefore, they cannot be blamed for all the incidental results that have followed such developments.

137. *Have mills replaced handloom cloth ?*—It has been claimed by certain Millowners' Associations that the expansion of mill-cloth was at the expense of foreign imports and not of indigenous handloom products. In Appendix XXI, we have given figures for the relative consumption of mill, handloom and imported cloth, in the Indian market. In Table LXIV (*a*) below, we reproduce figures on a five-yearly basis, so as to summarise the contents of Appendix XXI for ready reference :—

TABLE LXIV (*a*).—*The relative consumption of mill, handloom and imported cloth in the Indian market.*

Year.	(In million yards)					
	Net Imports.	Percentage of total.	Retained mill production.	Percentage of total.	Handloom production.	Percentage of total.
1901-02 . . .	2,042	62·7	387	11·9	827	25·4
1906-07 . . .	2,193	56·5	588	15·1	1,102	28·4
1911-12 . . .	2,362	52·0	1,020	23·8	995	23·3
1916-17 . . .	1,771	48·3	1,297	35·4	598	16·3
1921-22 . . .	980	28·4	1,529	44·4	938	27·2
1926-27 . . .	1,759	34·9	2,068	41·6	1,217	24·1
1931-32 . . .	760	15·7	2,768	56·9	1,332	27·4
1936-37 . . .	753	14·4	3,220	61·5	1,265	24·1

In the above table the figures for net imports are as shown in the official statistics. In the case of Indian mill production, all exports of cotton cloth are deducted from the total mill production so as to arrive at " retained Indian mill production ". It was not possible to allocate the exact share in the exports of the handlooms. Hence in the figures for handloom production, no deduction is made on account of imports. This fact is likely to show some underestimation in the case of mill production and overestimation in that of handloom production. The figures for total mill as well as handloom production are based on our estimates, which standardize the width so as to facilitate comparison, as explained in Chapter III. It will appear from the figures in the above table that the mill as well as handloom production has registered an increase. While, however, it has been a very substantial increase amounting to 706 per cent between 1901-02 and 1936-37 in the case of mills, it has been only 53 per cent in that of handlooms. On the other hand, net imports show a decline of 63 per cent during the same period. In view of the fact that total consumption itself has increased enormously, it is difficult to decide whether mills have replaced imports or handloom production, by reference merely to the absolute quantities for these three categories. For this reason, we have to consider what are the percentage shares of cloth

consumption enjoyed by each of the three in the Indian market. Looking at the figures for percentage shares, it appears that the handloom industry has maintained its position at a fairly steady percentage during the period, although there have been minor fluctuations. Thus it appears that during the last war, the share of handlooms went down considerably, but it rose again thereafter, and has been more or less steady since. On the other hand, the share of mills rose enormously before and during the last war, suffered a slight decline thereafter and during the last decade has risen steadily again. In the case of imports, the decline has been fairly continuous, barring a few years after the last war, which were obviously difficult years for the Indian mill industry due to various causes. It might thus appear that the contention of the Millowners' Associations is supported by the figures. We have referred to this question in paragraphs 20 and 41 and shall be reverting to it in Chapter X. Here it may be said that the total quantity of production or shares in the total cloth consumption cannot be a proper criterion for deciding the issue of the competition between mills and handlooms. In the first place, the figures of handloom production, as shown in paragraph 41 are likely to have been progressively overestimated. Secondly, "price" competition, rather than "quantity" competition, is the crux of the matter, because low prices of mill cloth, which set the pace of cloth prices everywhere, impinge upon the weaver's margin of profit over and above his costs which are usually higher than those of mills. Thus, mills are in a position to reap a greater profit for a given quantity of cloth sold than the handloom weavers. Consequently, both the total and individual earnings of the weavers, which are severely depressed by mill competition, must be considered. There are other relevant points bearing upon this question, the consideration of which is postponed to Chapter X, for convenience of treatment.

138. *Competition in particular categories of cloth.*—Apart from the question of competition on the basis of total quantity, we may also consider how competition has been taking place in particular categories of cloth. Figures for the various categories of cloth, however, are far from complete. For instance although saris form much the biggest single item of the wearing apparel in India, it is classified in the trade statistics of India, partly along with "dhotis, chaddars, grey and bleached", and partly under general head of "coloured piecegoods", and, therefore, there is no means of knowing the actual production under that important item. Our information regarding handloom production is indeed still more meagre, as has already been shown. With such wide lacunae in our statistics, it would be extremely difficult to analyse this problem statistically. However, we give in Table LXV available statistics regarding the production in India and imports of certain classes of goods in which competition between mills and handlooms has been pronounced.

The trend of Indian mill production and imports indicates that imports went on fighting a losing battle throughout the period. Total annual imports fell from the average of 2,293 million yards in the first quinquennium (1907-08 to 1911-12) to 779 million yards in the last quinquennium (1934-35 to 1938-39),—a fall of 1,514 million yards or 66 per cent. In the meantime, total Indian mill production in the same period rose from 955 million yards to 3,779 million yards, *i.e.*, registered an increase of 296 per cent. Under "dhotis, saris and chaddars", imports fell during the period from 599 million yards to 93 million yards (a fall of 85 per cent), while Indian mill production

TABLE LXV.—*Table showing variations in Indian mill production and imports of cotton piecegoods.*

Period (quinquennial average).	(In million yards.)							
	GREY AND BLEACHED.				COLOURED.		TOTAL OF PIECEGOODS.	
	Dhotis, saris, etc.		Longcloth and shirtings.					
	Indian mill production.	Imports.	Indian mill production.	Imports.	Indian mill production.	Imports.	Indian mill production.	Imports.
1907-08 to 1911-12 . . .	300	599	252	618	185	533	955	2,293
1914-15 to 1918-19 . . .	376	561	402	416	378	386	1,444	1,810
Variation from preceding quinquennium.	*+76*	*—38*	*+150*	*—202*	*+193*	*—147*	*+489*	*—483*
1919-20 to 1923-24 . . .	454	432	460	239	466	286	1,676	1,336
Variation	*+78*	*—129*	*+58*	*—177*	*+88*	*—100*	*+232*	*—474*
1924-25 to 1928-29 . . .	611	525	544	316	595	446	2,087	1,789
Variation	*+157*	*+93*	*+84*	*+77*	*+129*	*+160*	*+411*	*+453*
1929-30 to 1933-34 . . .	988	211	698	276	654	329	2,817	1,094
Variation	*+377*	*—314*	*+154*	*—40*	*+59*	*—117*	*+730*	*—695*
1934-35 to 1938-39 . . .	1,293	93	946	207	838	292	3,779	779
Variation	*+305*	*—118*	*+248*	*—69*	*+184*	*—37*	*+962*	*—315*
Variation in the quinquennium 1934-35 to 1938-39 from quinquennium 1907-08 to 1911-12 (Million yards).	*+993*	*—506*	*+694*	*—411*	*+653*	*—241*	*+2,824*	*—1,514*
Ditto Percentage variation .	+331%	—85%	+275%	—67%	+353%	—45%	+296%	—66%
Percentage increase between the first and last quinquennia (Indian mill production + Imports).	54%		32·5%		57%		40%	

rose from 300 million yards to 1,293 million yards (an increase of 331 per cent). Under "longcloth and shirtings", the increase in Indian mill production was 275 per cent, while imports suffered a decline by 67 per cent. Again, under "coloured" goods, Indian mill production shows an increase of 353 per cent, while imports a decline of 45 per cent. During the period, the general rise in cloth requirements under these heads was 54 per cent for "dhotis, saris, etc.", 32·5 per cent for "longcloth, shirtings, etc.", 57 per cent for "coloured" goods, and 40 per cent only for total piecegoods. Thus, while the total available cloth from imports and Indian mill production increased only 40 per cent, the increase under certain items was higher. No doubt population increased in the meantime by 20·8 per cent and *per-capita* consumption probably also went up slightly. Could the whole of the increase in mill production under dhotis and saris have been due to the factors of growth of population and replacement of imports, only? The probability is that a certain part of this was due to replacement of handloom cloth also. It cannot indeed be proved; nor can it be disproved.

139. *Competition considered under counts.*—We shall now proceed to examine the nature and extent of the competition that has been going on between

handlooms and mills. This can be examined under the various ranges of counts, or under the different types of fabrics. In 1932, the Tariff Board (Report, p. 166) went into this question in respect of various ranges of counts and found that the competition between mills and handlooms was most severe in medium counts, *i.e.*, 21s to 50s. The Tariff Board also held that there was a good deal of overlapping in cloths of counts 20s and below, but the position of the mills was not so strong there as in the medium counts. As for high counts (*i.e.*, 60s and above), they thought that there was practically no competition. We find that this analysis still holds good in a general way. But there are important exceptions. One is that cloths of medium counts (20s to 50s) in which competition was severe are no longer such " a small proportion of the handloom weavers' output " as the Board then found. We have some doubt regarding the correctness of the statement even in 1932; at any rate, this is certainly not quite correct at the present time. Their view that the bulk of handloom cloth was of counts 20s and below also calls for scrutiny. In paragraph 90 in Chapter V, we have discussed the question of the distribution by counts of the consumption of cotton yarn by the handloom industry, and we invite a reference to Tables LI, LII, LIII, and LIV, and comments thereon. In the following Table (Table LXVI), we summarise some of the figures for ready reference here.

TABLE LXVI.—*Annual consumption of yarn of different counts by handlooms.*

Province.	1s—20s Percentage.	21s—40s Percentage.	41s—60s Percentage.	Above 60s Percentage.
Bengal	10·0	70·0	16·0	4·0
Bombay	16·0	59·0	20·0	5·0
Madras	42·6	38·4	12·4	6·6
Orissa	42·5	49·9	6·5	1·1
Bihar	92·6	6·1	1·0	0·3
Punjab	90·1	5·8	3·7	0·4
U. P.	84·2	12·6	2·7	0·5
C. P. and Berar . .	71·5	24·0	3·2	1·3
Average	54·4	33·8	11·8	

It may be seen from the above table that while 54·4 per cent of the total cotton yarn consumption in India is still below 20s counts, the percentage of such yarn is as low as 10 per cent and 16 per cent respectively in such important areas as Bengal and Bombay. Nor is the percentage of medium counts so insignificant. About 86 per cent of the total yarn used by handlooms in Bengal and 79 per cent in Bombay is between 20s and 60s. Madras and Orissa come next with 51 per cent and 56 per cent respectively. Even if we take counts 20s to 40s, the proportions are considerable. We have further to remember in this connection that the above proportions are based on weight. Obviously yarn of finer counts cannot be compared with yarn of lower counts in this way. If yardage of cloth or value of the produce is taken as the criterion, the proportion of cloth of medium counts will be found much larger. In regard to the yarn of high counts also the position is now different. At the time when the Tariff Board reported, the competition in high counts was with imported cloth (mostly Japanese). Subsequently, Indian mills have been devoting attention to spinning yarn

of high counts and to the manufacture of finer saris and dhotis from such yarn. In this way, mill production entered a new field wherein severe competition with hand-woven goods was inevitable. In cloths made from yarn of lower counts also, competition has been growing, because, among other things, the low price of finer mill cloths has caused a notable shift in demand throughout the country from coarse to medium and fine fabrics.

It will be clear from the above why some Provinces have been hit more than others. It was mostly in Bengal, Bombay and Madras, and in the Indian States nearabout these Provinces, that saris and dhotis of fine counts were formerly produced in large quantities; and the fairly numerous middle-class population that these goods catered for are also mostly in those areas. Therefore, when mill-made saris and dhotis became popular the result was injurious competition with the handloom products. In the colder Northern Provinces, especially in the Punjab and the United Provinces, and in the backward parts of the Central Provinces and Berar, Bihar and Orissa, weavers have been making mostly *garhas*, *motias*, *khèses* and other rough cloths using lower counts, and although in those areas also mill-made saris and chaddars have lately been in demand, local weavers were not as much hit as their confrères elsewhere. This will be clear from Table LXVI. It can be seen that while the percentage of yarn of higher counts (above 60s) of the total yarn in Bengal, Bombay and Madras is 4 per cent, 5 per cent and 6·6 per cent respectively, the corresponding percentages in the Punjab, United Provinces, Bihar and Central Provinces and Berar are 0·4 per cent, 0·5 per cent, 0·3 per cent and 1·3 per cent respectively. On the other hand, while the first three Provinces have only 10 per cent, 16 per cent and 42·6 per cent of their yarn below 20s, these counts form 90 per cent, 84 per cent and 93 per cent respectively of the total yarn consumption of the Punjab, the United Provinces and Bihar. This explains why weavers in some of these areas have not complained as bitterly as those elsewhere about mill competition. Directors of Industries of the Punjab and Sind Governments even say in their replies to us that there was no marked competition between mills and handlooms in their Provinces. No doubt there has lately been a large influx of mill saris into the Punjab, but it was in supersession not of locally made saris (because not many cotton saris were formerly made there) but of saris from Bengal or Bombay. It is true that the bulk lines of production in the Punjab,—*garha*, *khes* and other coarse fabrics—do not have much of mill competition to face; yet the Government of that Province stated before the Tariff Board, 1932, that 20 per cent of the *garha*, *khaddar*, *chaddar*, *khes*, etc., were subject to mill competition and that finer fabrics made with artificial silk had also to compete with Indian mill cloth as well as with Japanese imports (Evidence, Vol. II, p. 76). Again in 1935, that Government stated before the Special Tariff Board that there was direct competition in finer and coarse quality goods and indirect competition in medium qualities while only 'very coarse' qualities were free from competition. (*Evidence*, Vol. II, p. 352.) There is no indication that conditions in that Province have materially changed since

140. *Various kinds of competition in respect of fabrics.*—We may now survey the nature and extent of competition in respect of the various types of cloth. From this point of view competition may be between different styles of apparel, or between different types of the same apparel. In the latter case, the competition may be one of quality or price. Competition between different

styles of garments may be called "apparel" competition. Such competition (otherwise called substitution) may be said to arise when, for instance, men accustomed to wear hand-woven dhotis take to drill shorts (half-pants) instead, or when women formerly wearing *lehngas* and *dupattas* put on saris. On the other hand, when women change from one type of sari to another, we may call it "quality" competition. Examples of such competition are numerous. Plain-bordered saris and dhotis have been replacing lace-bordered saris and dhotis. Similarly, white saris have been replacing coloured saris. It is not so much the price that matters in this case but quality. When two similar fabrics, made of yarn of nearly the same counts and appearing almost alike compete with each other, the determining factor is price, and therefore such competition may be called "direct" or "price" competition. This is generally considered competition proper. In many parts of India, hand-woven saris have to compete with mill-made saris and dhotis of nearly identical counts, dimensions, colour and borders, and in such dealings the consumers' choice is decided by price rather than by quality. Competition may be considered under each of the classes explained above.

141. "*Apparel*" *competition.*—As has been mentioned in Chapter I, there have of late come about important changes in the cloth requirements of the people throughout the country, both in the style of garments and in the type of fabrics used. These changes have greatly increased the demand for mill cloth and depressed the market for hand-woven cloth. In view of the important bearings of such changes, we sent out a special questionnaire (See Appendix V) regarding this to District Officers and others in all parts of India, asking for the use of certain kinds of cloth in 1914 and 1941 and the information obtained confirms generally the impression we gathered during our tours. Among men, throughout India the use of turbans has greatly diminished, shirts and kurtas have come into common use, the demand for chaddars and *angavastrams* has fallen. Among women, generally, the use of blouses has become common throughout India. In the north, the sari has largely replaced the traditional Hindu (*lehnga* or *gagra*, and *kurta*) and Musalman (*salwar*, *kurta* and *dupatta*) forms of dress. The use of knitted goods has increased everywhere, especially among men. The information received from the United Provinces is the most striking and is given in the table below :—

TABLE LXVII.—*Changes in the proportion of people wearing different garment in the United Provinces.*

	Urban areas.		Rural areas.	
	1914 Percentage.	1941 Percentage.	1914 Percentage.	1941 Percentage.
Men—				
Dhotis or lungis . . .	94	85	99	99
Kurta or shirt	99	99	40	70
Achkhan or coat . .	10	40	(a)	(a)
Turban	5	(a)	70	10
Caps	60	85	5	35

TABLE LXVII.—*Changes in the proportion of people wearing different garment in the United Provinces*—contd.

	Urban areas.			
	1914 Percentage.	1941 Percentage.	1914 Percentage.	1941 Percentage.
Women—				
Lehngas and dupattas . . .	95	5	100	40
Saris and dhotis	5	95	(a)	60
Petticoats	(a)	70	(a)	(a)
Cholis	50	(a)	70	5
Jumper	(a)	75	(a)	(a)
Children—Boys—				
Shorts	(a)	50	50	50
Trousers (pants) . . .	50	5	(a)	(a)
Children—Girls—				
Frocks	11	40	(a)	(a)

(a) *Nil* or negligible.

The most noteworthy changes are in regard to women's clothes. The proportion of women wearing *lehngas* has fallen from 95 per cent to 5 per cent in urban areas and 100 per cent to 40 per cent in rural areas, whilst the proportion of people using saris has increased from 5 per cent to 95 per cent in urban areas and from *nil* to 60 per cent in rural areas. The proportion of women using the old-fashioned *cholis* has fallen from 50 per cent to *nil* in urban areas and from 70 per cent to 5 per cent in rural areas, while the proportion using petticoats and jumpers in the towns has increased from practically *nil* to 70 per cent and 75 per cent respectively. In regard to men, the change respecting the head-dress is the most striking. In towns 5 per cent of the people wore turbans in 1914; hardly any one wears it to-day. In rural areas, the proportion of turban users has fallen from 70 per cent to 10 per cent. At the same time the proportion of cap-wearers has increased from 60 per cent to 85 per cent in towns and 5 per cent to 35 per cent in rural areas.

These statistics may be somewhat startling, but while one may not agree about the exact proportions, the general trend is unquestionable. Although the proportions given from other parts of Northern India are not so striking, similar changes have been taking place all over Northern India and in a general way throughout India. In Bihar also the proportion of women wearing saris has increased, the use of chaddar by men has drastically gone down, and shirts or *kurtas* are much more in evidence. In the Punjab, according to the Director of Industries, women and children have left off the old styles of cloth (*lehnga*

or *suthan*, shirt and *dupatta*) woven from hand-spun yarn, and are now using mill-made fabrics. Cotton *phulkaris*, *khaddar* shirts and tight *salwars* have given place to mill-made muslins, scarfs, *gumtis*, khaddar crepe shirts, salwars, etc. In Chittagong (Bengal), Muslim ladies, who formerly wore *tamens* and *rumals* are today seen in mill-made printed clothes.

In Bombay, according to the Director of Industries, gold-lace turban cloths and red *pagotas* (with gold-lace headings) have been superseded by caps, hats etc.; the use of *uparnas* has ceased altogether; *angarkhas* have been replaced by coats made of mill-cloth; the use of knitted under-vests, sports shirts, cardigan jackets and sweaters has been spreading rapidly. Among women, *cholis* have been largely replaced by *polkas* and blouses of a wide variety of designs and the use of *shelas* or *selas* (invariably a hand-woven fabric and costly) has nearly stopped. Girls and young women now wear frocks, jumpers, and underwears in place of saris and khans.

South India, which has been the stronghold of traditional dress, has also been changing rapidly in recent years. Among men, turbans have been almost entirely discontinued, at least in the towns; *angavastrams* have also fallen into desuetude and in their place shirts and hosiery goods have come in. The use of drill shorts has increased everywhere both among men and boys, especially in urban areas, and this has reduced the demand for dhotis.

The effects of all this on the handloom industry have been far-reaching. The *lehngas* and *dupattas* formerly used commonly by Hindu women and *salwars* and *kurtas* worn by the Muslim women were invariably made of handloom cloth, but the saris and dhotis which have taken their place are largely made with mill-made cloth. The adoption of saris in the towns made the use of petticoats desirable, and in this also the mill-cloth is preferred. When men discontinued the use of the traditional *pagris* or pagotas, they either took up caps or made plain turbans with cheaper mill-cloth like *tarsuti* mulls. The disuse of the old turbans has affected many centres throughout the country. In several hand-weaving centres like Bulandshahr and Sikandrabad in the United Provinces, large number of weavers were thrown out of employment by this. Burhanpur (Central Provinces), where a large weaving population prospered for long by making fashionable silk cloths for the upper classes in Central India and even exported luxury goods to Persia, is now in a decaying condition owing to the disappearance of this trade. The turban cloths made were from 10 to 50 yards long and were priced at anything up to Rs. 50. Many other centres in Central Provinces (Chanda, Seoni, Champa, etc.) have also suffered the same fate. Yeola in Bombay, Amreli in Baroda, and Paithan and Nanded in Hyderabad, were also turban weaving centres but no longer. Certain centres in South India, especially Coimbatore, Satyamangalam and Dindigal, formerly supplied turban cloth not only in Madras Presidency and Mysore but also in Bombay Presidency, Central Provinces and Berar. Till 1915, Coimbatore flourished as a centre of turban cloth, made with spun silk and mixed silk yarn, but when the prople of Maharashtra began to wear caps, the wise weavers of Coimbatore enlarged their sari weaving trade and thus made up the loss. But the less enterprising weavers elsewhere were not able to follow such an example.

142. *Quality competition.*—Competition of a somewhat different category came to operate when middle-class people of both sexes began to prefer light mill-made saris and dhotis to the traditional heavy lace-bordered saris and

dhotis previously worn. The garment remained the same ; the mode of wearing also continued; but the *amor propre* of the weavers was for something lighter and smarter than the old-fashioned fabrics, hoary with age. All over India, Hindu men of higher castes used to wear laced-border dhotis, and especially for high-caste Hindus it was a prescribed religious custom to wear certain handloom cloths like *pitambar* or yellow silk garment on special occasions. During the last few decades such habits have fallen into desuetude and men, especially younger men, have begun to wear plain mill dhotis. In this way the *gundanchu* dhotis of Salem and Conjeevaram (Madras), and the silk or fancy-bordered dhotis of Serampore and Pharasdanga (Bengal), and of Umrer (Central Provinces) have gone-out of fashion and those who had been making such dhotis have lost their employment. In some of these places (*e.g.*, Umrer), weavers took to making plain dhotis but could not compete with the mills. The superior handloom dhotis of Petlad (Baroda) were first replaced by Manchester dhotis which in turn have been replaced by Indian mill dhotis. Similarly Dacca and Santipur dhotis with ribbed or figured heading and fancy borders have been replaced by mill dhotis. Just as men wore lace-bordered dhotis, women of the middle class formerly wore silk or lace-bordered saris and on ceremonial occasions only wore silk saris of colours suited to the occasion. For long they were reluctant to use mill-made saris, at any rate on ceremonial occasions. But gradually ideas changed ; a preference for washable saris woven with elegant designs came among the younger women, and thus mill *patals* in Bombay and grey or coloured mill saris elsewhere have come into fashion. Such changes in fashions have brought about disastrous results in many well-known centres which had long supplied middle-class saris. Poona, Ilkal, and other centres in Bombay, where the traditional types of saris were made, have greatly suffered. Burhanpur (Central Provinces) was severely hit by the falling demand for jari-bordered saris. Santipur (Bengal) fell on evil days when its elegant lace-bordered cotton saris had to compete with the cheaper mill saris with attractive jacquard-border from Bombay and Ahmedabad. In Madras, formely coloured silk and cotton hand-woven saris of nine yards length had been the fashion, but now women wear shorter mill-made saris on all occasions, and generally they are white or of light colour. Thus hand-weaving centres like Kornad, Salem and Uppada have lost much of their custom, and looms which at one time were active are now plying only occasionally. In the case of both saris and dhotis, the successful competition of the mills was not only due to the change of fashions, but to an opportunity given to them by a combination of circumstances of which the principal one was the Congress ban on cloth made of imported yarn. That ban prevented the hand-weavers in several centres from maintaining their production, and by the time high count yarns of cotton from the Indian mills became available in India, the custom had already passed from the handlooms to the mills.

In the case of lungis there was formerly some competition from imported (Dutch) lungis, but this was not very effective as a properly checked lungi cannot be economically produced in the mills. But the result was the same when competition came from the printed lungis and dyed poplins. The Bengal *chaddars* have been for long the preserve of the handloom industry, but latterly the fine chaddars and *uranis* made in Bankura have been replaced by shirts or coats. The replacement of the indigenous *mosaika kapada* by mill-made

mosquito curtains has also affected handlooms in many parts of Bengal. The woollen *kamblis* formerly used all over India in the colder months were hand-woven, but latterly mill-made rugs and *kamblis* have come into common use and have thus ousted the dearer hand-woven stuff. In this way, indirect competition of many kinds has been operating all over India and this has led to the decline of many hand-weaving centres.

143. *Price competition.*—Had the competition been only indirect, *i.e.*, from one style or garment to another, the position of the handloom would not have been so materially affected. But what really happened was that side by side with such indirect competition there was also going on a much more direct competition, *i.e.*, one fabric replacing another of similar kind by being cheaper. Such a competition has been taking place over a wide range of counts and cloths. This competition was greatly helped by the steady fall that had been going on in the price of piecegoods from 1926 to 1936,—a factor which greatly weakened the competitive power of the hand-woven cloth. Prices of mill cloth went down owing to internal and external competition, but the handlooms were not able to keep pace with this. It meant to them straitening their belt or closing down.

Samples of hand-woven cloth as well as of competing mill cloth have been sent to us from several Provinces and States. Among these, there are some which illustrate the price competition which has been going on between handloom and mill-cloths. Appendix XXIX contains full details about these; in the following table (Table LXVIII) we reproduce some of these particulars. (Numbers of samples as entered in the table and mentioned in the text that follows are those given in Appendix XXIX.)

TABLE LXVIII.—*Description of samples of mill and handloom fabrics.*

Number of item.	Description.	Handloom.	Mill.
13	Sari (coloured)	Dhulia (Bombay). 45″ × 8 yards. Warp—20s, Weft—24s, Ends per inch 32, Picks per inch 48, Price per piece 66 as., Date of sale 16-8-41, Weight 64 tolas, 1¼″ artificial silk dobby border.	*New Pratap Mills, Dhulia.* 48″ × 8 yards, Warp—24s, Weft—32s, Ends per inch 40, Picks per inch 40, Price per piece 56 as., Date of sale 16-8-41, Weight 60 tolas, 1½″ two-fold cotton mercerised dobby border.
14	Sari (coloured)	Sholapur (Bombay). 42″ × 7½ yards, Warp—20s, Weft—20s, Ends per inch 36, Picks per inch 48, Price per piece 64 as., Date of sale 16-8-41, Weight 77 tolas, 3½″ Ilkal border with artificial silk, Plain heading, 15″ with artificial silk.	*Sholapur Spinning and Weaving Co., Ltd., Pancharan.* 42″ × 8 yards, Warp—20s, Weft—18s, Ends per inch 36, Picks per inch 32, Price per piece 46 as., Date of sale 16-8-41, Weight 64½ tolas, 3″ imitation Ilkal border with cotton, 7″ plain heading with cotton.

TABLE LXVIII.—*Description of samples of mill and handloom fabrics—contd.*

Number of item.	Description.	Handloom.	Mill.
23	Sari . . .	Bengal. 44″ × 5 yards, Warp—40s, Weft—40s, Ends per inch 50, Picks per inch 50, Price per piece 26 as., Date of sale 18-6-41, Weight 37 tolas, Dyed, warp, dyed weft, plain border, 2½″ in width.	*Bangasri Cotton Mills.* 44″ × 5 yards, Warp—40s (approximate), Weft—40s, Ends per inch 46, Picks per inch 36, Price per piece 23½ as., Date of sale 18-6-41, Weight 38 tolas 'Geeta', Grey warp, coloured weft, 2½″ plain border.
4	Coloured sari . .	Venkatagiri (Madras). 36″ × 6 yards, Warp—60s, Weft—60s, Ends per inch 70, Picks per inch 74, Price per piece 58 as., Date of sale 5-9-41, 1½″ plain border.	*Maftlal Mills, Navsari.* 46″ × 6 yards, Warp—60s, Weft—72s, Ends per inch 70. Picks per inch 52, Price per piece 46 as., Date of sale 5-9-41, 1½″ plain border.
5	Sari . . .	Venkatagiri (Madras). 43″ × 7 yards (grey), Warp—60s, Weft—60s, Ends per inch 60, Picks per inch 64, Price per piece 48 as., Date of sale 5-9-41.	*Maftlal Fine Mills, Navsari.* 45″ × 7 yards (bleached), Warp—60s, Weft—60s, Ends per inch 58, Picks per inch 48, Price per piece 46 as., Date of sale 5-9-41.
31	Bleached sari .	Santipur (Bengal). 47″ × 5½ yards, Warp—90s, Weft—80s, Ends per inch 80, Picks per inch 80, Jacquard border 200s, Width 3½″, Price per piece 60 as., Date of sale 26-10-41.	*Ramkrishna Mills, Ahmedabad.* 45″ × 5¼ yards, Warp—80s, Weft—70s, Ends per inch 68, Picks per inch 56, Jacquard border 200s, Width 3¼″, Price per piece 53 as., Date of sale 26-10-41.
8	Dhotis . . .	Kalladakurichi (Madras). 50″ × 2/4 yards, Warp—26s, Weft—26s, Ends per inch 56, Picks per inch 48, Price per yard 4 as., Date of sale 4-3-41.	*Gadag Mills.* 46″ × 2/4 yards, Warp—28s, Weft—28s, Ends per inch 52, Picks per inch 48, Price per yard 2¼ as., Date of sale 4-3-41.
9	Dhotis . . .	Madras. 48″ × 2/4 yards, Warp—20s, Weft—20s, Ends per inch 48, Picks per inch 40, Price per yard 5 as., Date of sale 4-3-41.	*Coimbatore Mills.* 48″ × 2/4 yards, Warp—18s, Weft—20s, Ends per inch 44, Picks per inch 40, Price per yard 0-4-10, Date of sale 4-3-41.

TABLE LXVIII.—*Description of samples of mill and handloom fabrics—contd*

Number of item.	Description.	Handloom.	Mill.
11	Dhotis . . .	Kalladakurichi (Madras). 52″×2/4 yards, Warp—26s, Weft—26s, Ends per inch 50, Picks per inch 44, Price per yard 5 as., Date of sale 30-5-41.	*Gadag Mills.* 46″×2/4 yards, Warp—28s, Weft—28s, Ends per inch 52, Picks per inch 48, Price per yard 2½ as., Date of sale 30-5-41.
12	Dhotis . . .	Kavundapadi (Madras). 48″×2/4 yards, Warp—20s, Weft—20s, Ends per inch 48, Picks per inch 42, Price per piece 22 as., Date of sale 9-6-41.	*Vasanta Mills, Coimbatore.* 48″×2/4 yards, Warp—20s, Weft—20s, Ends per inch 48, Picks per inch 40, Price per piece 19½ as., Date of sale 9-6-41.
16	Dhotis . . .	Bihar. 44″×4½ yards, Warp—20s, Weft—30s, Ends per inch 44, Picks per inch 48, Price per piece 23 as., Date of sale 2-7-41.	*Baroda Cotton Mills.* 41″×5 yards, Warp—18s, Weft—28s, Ends per inch 44, Picks per inch 40, Price per piece 19 as., Date of sale 4-7-41.
3	Dhotis . . .	Puthur, Madras. 50″ to 52″×2/5 yards, Warp—40s, Weft—40s, Ends per inch 60, Picks per inch 64, Price per yard 4½ as., Date of sale 9-6-41, ⅛″ dobby border.	*Ahmedabad Mills.* 48″×2/5 yards, Warp—40s, Weft—46s, Ends per inch 64, Picks per inch 48, Price per yard 4 as., Date of sale 9-6-41, ⅛″ dobby border.
24	Dhotis . . .	Bengal. 44″×5 yards, Warp—40s, Weft—40s, Ends per inch 50, Picks per inch 54, Price per piece 20 as., Date of sale 18-6-41, Weight 32½ tolas.	*Bangasri Cotton Mills.* 44″×10 yards, Warp—24s (approximate), Weft—32s, Ends per inch 56, Picks per inch 44. Price per piece 19 as., Date of sale 18-6-41, Weight 41 tolas.
28	Dhotis . .	Bankura, Bengal. 44″×5 yards, Warp—40s, Weft—40s, Ends per inch 56, Picks per inch 52, Price per piece 21 as Date of sale 30-3-41, Weight 31½ tolas.	*Bangasri Cotton Mills.* 44″×5 yards, Warp—24s (approximate), Weft—32s (approximate), Ends per inch 56, Price per piece 19 as., Date of sale 30-3-41, Picks per inch 44, Weight 41 tolas.

TABLE LXVIII. *Description of samples of mill and handloom fabrics—concld.*

Number of item.	Description.	Handloom.	Mill.
7	Thorthu . .	Taliparamba, Madras. 30″ × 58″, Warp—2/20s, Weft—2 20s. Ends per inch 29, Picks per inch 24, Price per piece 4½ as., Date of sale 9-6-41.	*A. D. Cotton Mills, Quilon.* 33″ × 58″, Warp—2/21s, Weft—2/21s, Ends per inch 29, Picks per inch 16, Price per piece 0-3-11, Date of sale 9-6-41.
25	Dobby border, grey chaddars.	Bengal. 50″ × 3 yards, Warp—2/20s, Weft—10½s, Ends per inch 32, Picks per inch 32. Price per piece 16 as., Date of sale 18-6-41, Weight 48½ tolas.	Name of the mill is not given; Chaganlall Madhavjee, Calcutta, is the name of the dealer. 45″ × 3 yards, Warp—8s, Weft—12s, Ends per inch 32, Picks per inch 34, Price per piece 12 as., Date of sale 18-6-41, Weight 56½ tolas.
30	Coloured and check chaddar.	Bengal. 54″ × 2⅞ yards, Warp—32s, Weft—32s, Ends per inch 56, Picks per inch 44, Price per piece 32 as., Date of sale 30-3-41, Weight 33 tolas.	(Mill's name not given) (Bengal). 51″ × 3 yards, Warp—32s, Weft—32s (approximate), Ends per inch 56, Picks per inch 58, Price per piece 25 as., Date of sale 30-3-41, Weight 37½ tolas.

144. *Competition in saris.*—The most serious competition is in saris of 20s to 40s counts. The mills have been operating in this field for some decades and have made headway putting on the market saris more or less resembling the handloom varieties in the counts of yarn used, dimensions, colour and the nature of the border. But at the same time they gave them a superior appearance by some special design on the border, by better finish, etc. It is this little modification that enables the Millowners' Association, Bombay, to say that the mills are not making saris "exactly of the count which the handlooms make". This may be so in a legal or technical sense, but economically this slight change does not make any difference. The point to be noted is that the consumer gets the fabric that he is accustomed to use, with a slightly more finished appearance and at a lower price. This naturally makes him prefer the mill fabric. We have got several samples of coloured saris from Bombay, *e.g.*, No. 13 (Dhulia, mill sari, 20s warp and 24s weft), and No. 14 (Sholapur, handloom sari, 20s warp and 20s weft). The competing saris are nearly of the same counts of yarn, colour, border, etc. Although there are slight differences, these samples are a clear case of direct competition. The difference in price between the Sholapur sari and the competing mill sari is only 2 annas, but that makes a great deal of difference in a price market like India. Such competition began in Sholapur as early as 1910,

when a mill there began to make saris of counts 20s to 30s, selling them at a slightly lower price than the handloom variety. Previously, Sholapur handweavers had markets in Khandesh and the Central Provinces, but they were also subsequently lost owing to the competition of local mills. In spite of such competition, the handloom industry in Sholapur is still holding out, chiefly owing to its fairly good organisation. Instances of direct competition have also been received from Ahmednagar and Sangamner. In the former place, 600 looms were engaged before 1925 on the production of saris of counts 20s to 24s with mercerised borders, but when a mill at Dhulia made similar saris at slightly lower prices, the weavers at Ahmednagar had to give up weaving those saris. We were told that they then changed over to saris of higher counts, 30s to 40s with stripes and checks; but the mills soon produced those kinds also. Similarly, a type of saris formerly made at Sangamner is said to have been ousted by mill-made saris from Chalisgaon. Thus the competition seems to have been pretty keen.

Competition of a somewhat similar kind has apparently been going on in the Central Provinces. We have received from the Director of Industries of that Province many samples of competing cloths. Some of them are cases clearly of direct competition. The mills have been producing saris similar in nearly all details to saris made traditionally on the handlooms. Competition in medium counts has been even more active in Bengal. The peculiarity of some of these (*e.g.*, No. 23) is that it is woven with dyed yarn, and such work has been till lately the monopoly of the handloom weavers. Latterly, the mills started weaving such saris and have ousted the handloom saris of that variety. Several centres in Bengal also have suffered in this manner.

Mill competition in saris of high counts is comparatively recent. We have got three samples of high-count bleached saris (Nos. 4, 5 and 31 in LXVIII). Nos. 4 and 5 are from Venkatagiri (Madras) which compete with mill cloths of the same counts, colour and pattern. Both are of 60s warp and 60s weft. They are similar to competing mill saris in most respects, and are easily replaceable; but the mill saris are cheaper, and, therefore, they have been making headway. No. 31 is a Santipur sari of 90s warp and 80s weft with a jacquard border 3½" wide. The competing mill sari is slightly of lower counts, lighter in weight and the elegant artificial silk design of its border along with its lower price gives it an advantage over the handloom sari.

In the case of high-count saris like the above, the mill competition started only about ten years ago. Until then handlooms made such saris with foreign yarn. Taking advantage of the high import tariff on foreign yarn, the mills pushed on the spinning of high-count yarns and soon some of them utilized them in weaving finer saris and dhotis. Various other circumstances which helped the mills in this matter have been explained elsewh

145. *Competition in dhotis.*—In the case of dhotis, as in that of saris, direct mill competition is in respect of medium counts. Dhotis of fine counts had been imported previously in large quantities and these did displace some of the superior dhotis previously in use, but such imported dhotis had not encroached on the medium and low-count dhotis worn by the common people in the countryside. Such competition started when the Indian mills in Southern and Western India began to manufacture dhotis suited to the peculiar requirements of the people. The Madras Provincial Handloom Weavers'

Co-operative Society has sent us several samples of similar mill and handloom dhotis of counts ranging from 20s to 40s which are believed to compete in the market. Of these samples Nos. 8, 9, 11, 12 and 16 are coarse types of dhotis, from 20s to 30s counts. The mill samples are from Navsari, Sholapur, Gadag, Coimbatore and Quilon, and are almost identical make, dhobi-washed and apparently pass for khaddar dhotis. We have also seen such dhotis in the warehouses of merchants in many parts of South India. A certain quantity of such dhotis is exported to Malaya and other plantation areas where Indians have colonised. The margin of difference in price between the competing dhotis is very narrow, but it is the determining factor in the case of the consumers of such cloth, who are mostly men of small incomes. The result of such competition has been a large fall in dhoti weaving on handlooms. In Bengal, according to the Director of Industries, some classes of medium-count dhotis have altogether ceased production. In Madras, dhoti weaving in Madura declined twenty years ago. In other centres, production has been going on, in spite of the low profit margin. But in Salem, Conjeevaram and other centres production has greatly diminished. In Hyderabad, about 15 years ago, fine and coarse grey dhotis with solid and ordinary borders were being produced, but due to mill competition weavers are now making only plain-border coarse dhotis. There is also price competition in dhotis of counts 40s to 50s or even 60s. Three samples for these have been sent to us (Nos. 3, 24 and 28). No 3 is a handloom dhoti from Puthur (Madras), 40s by 40s counts. The competing cloth is from an Ahmedabad mill and the weft is of slightly higher counts. Both have a dobby border. Similar samples have also been received from Bengal.

146. *Competition in gumchas.*—A towel (called by various names in different parts of India,—*gumcha, pancha, thorthu,* etc.) is a very popular kind of cloth, especially among the common people. Formerly the poorer classes wore *gumchas* as loin cloth and even now in the up-country tracts, this is done. At first competition came from superior varieties of mill towels, but as they were dearer, the old-fashioned *gumchas* did not feel the strain. Latterly, certain mills, especially in South India, have been making rough uncalendered *gumchas* somewhat resembling the handloom towels, and, therefore, competition has become effective and many handloom centres all over the country have suffered. The hereditary weavers of Malabar (Salis) had given up the production of every other fabric and had been confining themselves to this one line of production, *viz., thorthus,* which they considered as their preserve. But some mills in Coimbatore and Malabar Coast are trying to make exactly the same kind of coarse dhotis of small dimensions and are thereby encroaching on a very ancient line of production which has long been left to the handloom weavers. Sample No. 7 is a *thorthu* from Taliparamba (Malabar), where a large population of Salis have been counting on this as their only means of livelihood. We have seen several other samples of such *thorthus* and it must be said that some of them are of identical make, and it is believed that some mills had intended their fabric to look like, and pass for, hand-woven *thorthus.*

147. *Competition in chaddars.*—In Bengal, the coloured hand-woven *chaddar* was formerly a very popular garment. The handloom weavers have long considered this as their monopoly, and several centres have been engaged in making them, especially Bankura and Pabna. The demand for *chaddars*

has considerably fallen in recent years by the disuse of the habit of wearing such a garment, and even that limited demand is now met largely by the mills. A few years ago, mills began to make *chaddars* resembling handloom *chaddars* and sold them at lower price. Two samples of competing *chaddars* are given in the Table LXVIII (Nos. 25 and 30). One of them is a coloured check *chaddar* (No. 30) and it is a clear case of mills closely imitating handlooms in a field which had long been occupied by the latter.

148. *Competition in shirtings and coatings.*—Coarse grey plain shirtings have always been made in India on the handlooms and these used to have a steady demand among the village middle-classes who needed it for their *kumees* and *angarkhas*. The handloom weavers, therefore, enjoyed the benefit of the village market existing almost at their doors. The mills could produce such cloths of better texture and of finer counts with an attractive finish given by the process of calendering at a cheaper price and the improvement in communications made it possible for the mill goods to be sold in the village markets. We have received samples from Yemmiganur, Bellary District. The price of mill cloth which is calendered and contains a higher number of ends and picks and of counts 20s comes to 3·43 annas per square yard while 2·86 annas per square yard is the price of the handloom cloth which is of counts 10½s and contains 4 ends and 4 picks less than the mill cloth. The mill cloth produced out of finer counts of yarn, with a superior finish and better texture, is preferred by the consumers who no longer want to look at a coarse unfinished hand-made cloth, though slightly cheaper.

With regard to striped and checked cotton shirtings and coatings, the cost of manufacture in handloom favourably compares with that in the mill. The advantage in handloom is that for a piece of 24 yards, a design could be made, and, the scope of a variety of designs is, therefore, relatively greater than that in the mills. But the principal defect with the handloom weaver is that he is unable to keep up the standard qualities and, therefore, loses the markets which he established with difficulty in the beginning. Not only the factory owners of Cannanore and Calicut but the Sengunla weaver merchant of Erode who has a thousand looms under him have taken care to maintain quality and are able to sell their shirtings and coatings in competition with mills. In several other centres of Madras—Trichengode, Attayampa[illegible], Ammapet, Yemmiganur and Guntur—such fabrics are being made. [illegible]darwari merchant of Daltonganj (Bihar) has successfully demonstrated [illegible]e possibility of marketing hand-woven goods in competition with similar goods and have 100 weavers under him.

Another quality of shirtings produced by the handloom weavers is out of imported mercerised and fancy yarns. The mills make similar types of goods out of the imported yarns also. It is said that similar types of cloth mercerised or silk-finished by the mills compete with the handloom products; but the mill goods get a good price. But with a better organisation for a cheaper supply of yarn and for disposal of the hand-made products in the urban markets there is no reason why the handloom weavers should not be able to hold their own in this field. Unlike speciality products, shirtings and coatings being staple lines, have an extensive and growing market of great poitentiality in India, in view of the changes of fashions in men's wear desired elsewhere. In these lines, therefore, the handlooms may be actively encouraged to increase their production. Since the outbreak of the Japanese

war and the loss of the *lungi* market, vigorous attempts are being made to switch over handlooms in places like Gudiyattam, Triplicane, Washermanpet, etc. to the production of shirtings. Hand-calendering of the products is also prevalent. There is no doubt that the war, while it has disturbed the market for handloom products in other ways, has created an opening as well as an opportunity for the handloom industry in this direction.

149. *Unfair competition.*—As stated above, we do not consider the existing competition as unfair. Mills making saris or handlooms making coatings and shirtings do not constitute an encroachment. Even the copying of designs cannot be regarded as an encroachment so long as there is no law prohibiting it. In the last few decades, foreign mills, Indian mills and handlooms have been copying one another's designs. It may be contended that the encroachment that is unfair can arise when mills make any speciality cloth which by its very nature is regarded as handloom's preserve, but if mills are able to make such fabrics economically its speciality character disappears. No doubt society has a right when social justice calls for it to prohibit either the mills or the handlooms from producing any special fabric, but this power must be used with discrimination. Competition really becomes unfair, when one industry makes fabrics intended to pass for the products of the other and where deliberate price-cutting is practised. We have already shown that certain mills have been making unfinished dhotis and towels of a coarse kind (generally below 14s) which pass for hand-woven cloth. There are also examples of other coarse grey cloths of inferior texture being heavily finished to give the buyer a false idea of superiority over similar handloom cloth. It is said that certain cloth dealers buy mill-made mulls and convert them into saris after dyeing or printing them.

It has also been alleged by weavers that unfair price-cutting is resorted to by mills. It is said that the mills sell at low prices cloths which compete with handloom products and make good the loss by selling other cloths at profitable prices. We have not been able to go into the question, as it would require a careful analysis of mill cloths for which information has not been placed in our hands.

We have also found in many parts of India that a great deal of competition exists within the handloom industry itself. For instance, *lungi* weavers in Chittagong complained that there is a serious competition from Madras. Similarly, silk weavers in Sualkuchi (Assam) complained of competition from Mysore and Benares handloom goods. Owing to competition from South Indian centres weavers in Mysore are said to have given up the production of cotton dhotis and taken to the weaving of cotton and artificial silk saris. In some places, the quality of handloom cloth has deteriorated owing to such competition, and this has been dealt with in Chapter VI. It has also been alleged that there is unfair competition among handloom weavers but we have not been able to gather any evidence of it.

150. *Encroachments of the handloom.*—The Millowners' Association, Bombay, state that there is evidence to show that the handlooms have recently encroached on the styles of goods produced by the mills. "Coatings and shirtings, especially of printed yarn and check designs, were the monopoly of mills only a few years ago, but the handlooms have now imitated the mills and have begun to produce just the same type of coatings and shirtings." Shirts and coats of an old type (*kumees* and *angarkha*) have always been used

in India, and cloths for these garments have also been made by the handlooms for centuries. Even if we take the modern kinds of coatings and shirtings they were first made in Malabar at the Basel Mission handloom factories from about 1851. Printed yarn, on the other hand, is a new type of raw material. It may be true that the Indian mills were first in this field, but the use of printed yarn came from foreign countries, and if mills have committed no wrong in making of such yarn in India, we cannot blame the handloom weaver for using the same material. The hand-weavers were naturally slow in taking up new ideas and it is no wonder that they used printed yarn later than mills. As for check designs, it has been stated in Chapter IV that checks were made by the Basel Mission factory in Malabar long before most Indian mills were started. They also made the first khaki drill, and this has now become almost a monopoly of the mills. Both mills and handlooms have borrowed each other's designs, but this is nothing very objectionable. This goes on all over the world, except where law prevents it. At any rate, it must be admitted that while the mill production of cloth similar to that of handlooms has resulted in unemployment over wide areas, similar action by the handloom has scarcely been perceived by the mills. Such is the difference in the position of the two industries.

151. *Powerloom competition.*—As already stated, a more serious rival to the handloom industry than mills has arisen in the small-scale powerloom factories. This rival combines in itself, owing to its medium-scale production, the advantages of both mills and handlooms. It can utilize cheap electrical power and avail itself of the modern appliances in weaving. The competition of powerlooms is a growing phenomenon; about 15 years ago the handlooms had nothing to fear from them. Powerlooms are not subject to any irksome restrictions such as the Factories Act or special taxes. As such, they are a source of competition in important lines to the mills as well. The cost of production in powerlooms is comparatively low owing to small overhead charges and economies of mechanical production. Thus the contest has now become a three-cornered one.

The principal fabrics in which powerlooms offer serious competition to the handlooms are saris, shirtings and coatings, and fancy cloths of various kinds. While, however, in the Punjab and at some of the Bombay centres, such as Surat and Bhiwandi, powerlooms produce fine cloths out of spun-silk and artificial silk and mercerised cotton, the powerlooms of the Bombay Deccan have largely specialized in saris produced from mercerised and doubled cotton yarn. So far as the handloom industry as a whole is concerned, there is both direct and indirect competition offered by powerlooms. The hand-made coloured saris of Gandevi and Navsari (Baroda), Sholapur, Ilkal, and Guledgud have to face the fierce competition of powerloom produced goods from Surat, Ichalkaranji, Sholapur, Dhulia, etc. The Director of Industries, Mysore, in a special note on this subject, states: "There are at present about 300 powerlooms working in 26 cottages in Bangalore City, where cotton coatings as well as filature silk saris of various patterns and designs are being manufactured. In recent years, considerable improvements have been effected in the manufacture of these saris and the general tendency of the people has also turned to the fancy shades and designs of cloths produced cheaply on the powerlooms, with the result that a large number of silk handloom weavers of Bangalore have lost their hold on the market and consequently been thrown

out of employment." At Dodballapur, another powerloom centre, we are further informed, that "as a result of keen competition from these looms, the number of handlooms in this town has gradually decreased from about 1,000 in 1933 to 325 in 1941". At Malegaon, Bhiwandi (Bombay) and Ichalkaranji (Kolhapur State) the handloom weavers in the neighbouring areas have similarly suffered. The more well-to-do amongst them have themselves installed powerlooms and employed other weavers. Although, however, the employment in these particular towns has probably risen, we cannot say the same about the total employment of the weavers in the district or area as a whole. The following data regarding samples of powerloom products and corresponding handloom products are interesting, as showing a severe "price" competition.

TABLE LXIX.—*Data regarding samples of competing handloom and powerloom fabrics in the Central Provinces.*

Sample* No.	Description.	Handloom.	Powerloom.
21	Sari (with gold thread).	50"×9½ yards, Price per piece, 166 annas. Date of sale, 13th May 1941.	48"×9 yards, Price per piece 88 annas. Date of sale, 13th May 1941.
22	Sari . . .	50"×9½ yards, Price per piece 64 annas. Date of sale, 13th May 1941.	48"×9 yards, Price per piece 56 annas. Date of sale, 13th May 1941.

* See Appendix XXIX for these number figures.

On the other hand, it must be stated that the powerlooms, owing to their inability to use singles yarn, are not in a position to compete with certain types of handloom products. But still it is feared that in the future, the powerloom is likely to be a greater menace to the handloom than at present.

152. *The consequences of mill competition.*—As has been mentioned above it is extremely difficult to assess statistically the consequences of mill competition on the handloom industry. Data of a more detailed nature will be required for doing so. However, it is possible to get a general idea of the trend.

Competition has been keenest in areas (like Bengal) where white clothing has been in vogue. On the other hand, where coloured clothing is used, mill cloth has not made much headway. Thus, in the Tamil Districts of the Madras Province and in the Karnataka and Maharashtra tracts of the Bombay Province, women, at any rate in rural areas, still stick to their coloured cloth, and the handloom still continues to have a market. Even in such tracts, the growing number of middle-class women in the towns have been fast changing over to a new pattern of clothing, as already shown.

We have received information regarding such changes from several experienced ladies. The large expansion in the use of mill-made saris among middle-class women of Southern India can be seen, for example, from the data which we have received from Sri M. Lakshmi Ammal, Professor, Queen Mary's College, Madras. Twentyfive years ago, the typical ward-robe of a young woman in Madras would consist of four lace-bordered silk saris for special occasions, four ordinary silk saris and about four ordinary cotton saris

for everyday wear making a total of twelve; and all the twelve saris would be hand-woven. Today, a young woman of the same class would have about double the number of saris of which two or three would be silk hand-woven saris for special occasions, possibly bought for her wedding, one or two imported georgette and voile saris for parties, and a khaddar sari or two bought from khaddar exhibitions. All the rest would be Indian mill-made cotton saris for everyday wear. Twentyfive years ago Hindu women of the upper classes wore no mill-made saris, at any rate, on ceremonial occasions or at parties; nor did they wear white saris, as white was considered inauspicious and improper. All the saris were then of 9 yards. Since then a great change has happened. The idea of wearing clothes washed and ironed by the dhobi has taken fast root and this has had much to do with the increased use of white saris or saris of light colours made in mills. This idea, however, has not so far appealed to the working-class women, because they believe rightly or wrongly that mill saris do not last long and, therefore, in spite of hand-woven saris being dearer they continue to use them. This consideration does not weigh with the middle-class and upper-class women because, "modern women do not want their saris to last long; they want to buy them cheap, wear them out quickly and renew their ward-robe again". Therefore, "plain white saris, patterned white saris, lightly dyed saris and all mill-made saris are considered the right kind of wear for school, college, hospital,—for any place outside the home. Hand-woven cotton saris are definitely the wrong type of clothes outside the home, and silk saris though considered fit for parties and home wear are again not as correct wear as white mill saris fresh from the laundry". In 1920, a college girl at Madras from a Hindu home would own about 5 to 10 Kornad saris and 3 to 4 hand-woven cotton saris of all deep colours (black, red, chocolate, green, brown, plain or patterned). "A present-day Hindu college girl would own three or four silk saris of which one or two might be Kornad and the others foreign silks, and about two dozen cotton saris of which a dozen are likely to be white saris (mill-made) and the others of light colours (also mill-made)." It will be clear from the above why the competition between hand-woven and mill-made saris has turned out largely against the former.

The result of such competition can also be studied from certain statistics of production in an area where competition has been severe. We have received from Rao Bahadur C. K. Chitale, of Ahmednagar, information regarding the number of saris woven since 1920 by the Padmasali weavers of his town. As this community has a special organisation for stamping all cloths, annual statistics of sari production has been maintained from 1920. In the following table are given the total number of saris produced from year to year, and the amount received as stamp fee.

TABLE LXIX.—*Statement showing the number of saris produced from 1920 to 1940* (Rate for stamping: 3 pies per sari).

Year.	Amount received per year.	Number of sari manufactured per year.
	Rs.	
1920	2,743	175,552
1921	3,141	185,501

TABLE LXIX.—*Statement showing the number of saris produced from 1920 to 1940* (Rate for stamping : 3 pies per sari)—*contd.*

Year.	Amount received per year.	Number of sari manufactured per year.
	Rs.	
1922	5,072	324.608
1923	4,618	295,552
1924	5,314	340,096
1925	5,314	340.096
1926	5,106	326 784
1927	4,015	256.960
1928	3,500	224.000
1929	2,441	156.224
1930	2,059	13,776
1931	2,553	163,392
1932	2.122	135,808
1933	1.494	95,616
1934	1,556	99,584
1935	1,435	91,840
1936	1,397	89.498
1937	1,162	74,368
1938	1,095	70,080
1939	901	57,664
1940	856	52,384

It has been ascertained by us that this fall in the number of saris has not been due to any fall in the number of members, nor due to some of the sari-weavers changing over to other lines of production. To-day the demand for their saris is confined to marriage seasons. As the demand for saris went on diminishing, they had to contract production, and thus from about 340,096 in 1924 the number of saris has come down to 52,384 by 1940. It is also learnt that other weaving communities (Salis, Koshtis, Devangas, etc.) in Ahmednagar have not fared any better during the period. In some of the centres similarly affected, there has been a shift to coarser fabrics which have a local, if limited, market. Thus, hand-weaving has deteriorated in many parts of India.

153. *Adjustments in production.*—In certain other centres, however, hand-weavers have shown great capacity for changing their line of production when faced with the loss of markets. The example of several centres in South India is rather creditable. Twenty years ago, Madura was principally engaged in making dhotis and angavastrams with silk and lace borders, but as the demand for these declined with the growing popularity of *khadi* and mill dhotis, they changed over to fine saris of counts 80s to 100s of various designs and colours, and these fabrics have captured the fancy of middle-class women not only in Madras but in many other parts of India. These saris have sucessfully withstood mill competition and the total annual production is now estimated at 2·7 million yards. When Dindigul (Madura District) lost her trade in laced turban cloth, which formerly commanded a wide market in Bombay and Hyderabad, the weavers there took up saris of the Madura type. A similar change happened in the neighbouring centres, Paramakudi and Palani. In all these centres together, the annual production of saris now is 7 million yards, but hardly a million yards was produced some years ago.

Coimbatore formerly produced turban cloth chiefly, but now medium-priced saris of excellent colours and designs are made there. Kistna and Guntur districts which previously made chiefly *lungis* and *kailis* for export to Burma, have had to change over to saris, mostly coloured. In the Guntur district alone, sari production amounts to 17 million yards per annum. All the shifts, however, have not been to saris. In Cuddapah weavers who formerly made turban cloth are now weaving shirtings of the modern style. In the Kurnool district, weavers now weave poplin shirtings and check coatings, and are even making dhotis of the mill pattern to suit modern tastes. In Erode and Trichengode too, weavers have shown considerable skill in making shirtings and coatings. Similar shifts in the line of production are reported from the United Provinces. As the demand for *lehnga* and *garha* cloths has diminished, many weavers, have taken to the production of striped shirtings, checks and dyed fabrics generally. The introduction of cheap jacquards helped this change. Those who formerly made *jamdanis* and *kinkhabs* have changed over to plain *garha* and ordinary Benares saris. Many weavers have also taken up artificial silk weaving.

154. *The handloom's sphere.*—It would, however, be incorrect to assume that all the weavers affected by competition have been reemployed by the shift to new lines of production. Although our information in this matter is meagre, we have reason to think that unemployment and underemployment have increased among them. After several years of competition between mills and handlooms, it is now possible to say in a general way in what fabrics the handloom has held its own. It is also necessary to give some indication as to the lines of production which they should expand and preserve in for the future. Handlooms have an advantage over mills in regard to weaving multi-coloured varieties of cloth, which cannot be economically produced in the mills, solid-bordered saris, striped and checked saris with variegated colours and designed borders, extra-weft figured saris (like Benares saris), saris with gold-laced border striped and checked, cotton-and-silk-mixed saris, silk-bordered cotton saris, loom-embroidered all-overs (swivel effect), check *lungis*, *sarongs*, *kailis* and Madras handkerchiefs, *thavnis*, coloured woven chaddars, etc. Mills have a greater advantage in making grey goods of plain weave, twills, drills, jeans, satin, saris without stripes or checks, grey or dyed chaddars, dhotis, ordinary shirtings and coatings, because these are all suitable for mass production. Ordinarily, therefore, it will not be advisable for handlooms to take up such production.

The two chief lines of handloom production in the past were saris and dhotis. Dhotis being mostly plain white cloth, the mills have a clear advantage in their making, and, therefore, even during the last century this line of production was lost to the handlooms, at any rate in Bombay and Bengal. In some Provinces (*e.g.*, Madras), the handlooms are still able to make a large number of even common dhotis, not to speak of the lace-bordered variety required for wedding and other ceremonial occasions. The dhotis and *garha* pieces of low counts worn by the peasants and the people of backward areas are still largely hand-made. The sari remained for long a handloom preserve owing to its ornamental character and owing to the conservatism of our women-folk ; but by the steady enterprise of Indian mills since 1925, a certain part of the market in saris has been lost to the handlooms. Thanks largely to a fundamental change in popular tastes, light mill saris are now preferred

by women, at any rate in urban areas. The handloom, however, still commands the custom of the rural women-folk in many parts of the country and a part of the custom of the middle-class women in urban areas. Saris of 20s counts and below, whether white or coloured are mostly hand-made and these are worn by peasant women generally and by most women in the backward tracts. It would appear that the backward classes of Chota Nagpur have lately developed a taste for mill-made saris and cheap prints, and that the old coarse hand-woven saris and *chaddars* are being slowly discarded. In the middle ranges of counts, 20s to 60s, handlooms are unable to compete in grey or dyed saris, but are offering a stout resistance in multi-coloured varieties, especially striped and checked, saris, and mixed cotton silk saris. Madura and Coimbatore in Madras, and Madhobdi and Dhanyakhali in Bengal, and to some extent Sholapur are able to carry on a large production in saris of medium counts. Saris of higher counts mixed with silk and gold thread are still made by handlooms, but as cheaper mill saris of fine counts and elegant jacquard borders are now available, the demand for expensive hand-woven saris has fallen. No doubt there is still a small demand for gold-laced saris made of silk and cotton yarn for marriage and festival occasions, but this demand is a very small and rigid one.

On the other hand, there are perhaps new prospects in the field of shirtings and coatings the demand for which has been growing and is bound to grow in future. As has been shown above, handlooms have been able to produce striped shirtings and coatings at competitive prices in Madras, United Provinces and elsewhere. No doubt such advantage the handloom can have only in certain types of shirtings and coatings. But the demand for such shirtings and coatings is also a growing one among the middle and lower middle class in towns as well as villages, and with some organisation it may give employment to a large number of weavers. Nor are such possibilities confined to shirtings, and coatings; there are also other fabrics.

One conclusion we may draw is that a new alignment is taking place in regard to the production lines of mills and handlooms. The question is not what the mills or handlooms were formerly producing, but what each could produce economically. Because a cloth was produced by the handloom first (as in the case of the sari and khaki drill cloth) it does not follow that it must always be the handloom's preserve. A gradual process of economic adjustment has been going on, and in the result each industry is coming to produce what it could most efficiently and cheaply. This process must be helped and not hindered. By giving fair opportunities to each industry for carrying out what it could do most efficiently, the welfare of both and of the community could be maximised.

CHAPTER IX

Co-operation and State Aid

155. *Early efforts in weavers' co-operation.*—The early efforts of the Provincial and State Governments in India to help the hand-weaving industry have been explained in Chapter I, and it remains for us here to deal with the period after 1935, with special reference to the utilization of the Government of India grant to the Provincial Governments. As the agency of the co-operative societies has been made use of in the administration of this grant, it may be desirable to give here a brief account of the co-operative efforts made in the various Provinces for aiding the handloom industry. Such efforts began soon after the introduction of the co-operative movement in India under the Co-operative Societies Act of 1904 ; for many of the early co-operators felt that the ills of the small-scale industrial producers as well as of agriculturists could be cured by the co-operative remedy. But it must be pointed out that the co-operative movement had not accumulated much experience in Europe in dealing with small-scale industrial producers. Co-operative workshops had been organised in several parts of Europe and such attempts were highly commended, some enthusiasts hailed these as the beginnings of a new economic order ; but the actual achievements were meagre. The handloom industry presented a quite different problem, *viz.*, to give finance and marketing facilities to handicraftsmen working in their own scattered homes. These handicraftsmen were found nearly as impecunious and even more dependent on sowcar finance, and, therefore, the co-operative leaders naturally thought it right to apply to them the same remedy they were trying to apply in the case of agriculturists. Thus, co-operative societies of weavers were started in many parts of India, chiefly for providing credit. Unfortunately most of these societies fared badly. Nevertheless, the MacLagan Committee (1912) expressed great hopes about the weavers' co-operative societies, believing as they did, that handloom weavers were "amenable to co-operative ideas and anxious to learn" and "generally most punctual and honest repayers". This, however, was soon found to be too optimistic an estimate and many disillusioned persons came to consider the co-operative society as altogether unsuitable for the improvement of handloom weavers. We shall now see how the movement fared in different Provinces before 1935

156. *Weavers' Co-operative Societies, 1905-35.*—Let us take a bird's-eye view of weavers' co-operation as it has developed so far in some of the Provinces, as this will enable us to grasp the problems of co-operation in this industry better.

Madras.—In Madras the earliest attempt was the weavers' Co-operative Union at Conjeevaram started in 1905. This Union had a chequered career and had to be liquidated in 1919-20, owing to the severe crisis it passed through during the war. In 1916-17 a Weavers' Co-operative Society was organised in Berhampore for the supply of silk yarn and for the marketing of finished goods. From 1920 onwards, a large number of similar societies was started. By 1927-28 the number reached 63 with a working capital of Rs. 1·5 lakhs, but the number declined to 27 by 1933-34 and the working capital also

declined to about Rs. 1 lakh. Most of the societies did not work properly and in nearly all years, transactions of the societies resulted in a net loss. The Townsend Committee on Co-operation (1928), observed that the help given by the co-operative movement to the weavers was "negligible" and that most of the weavers' societies were doing little, if any, work. The causes of the failure were said to be : (1) the comparative financial weakness and consequent incapacity to meet outside competition ; (2) wide fluctuations in yarn prices and consequent loss resulting from the societies keeping stocks of yarn ; and (3) difficulty in marketing finished goods. It was reported by the first Registrar of Co-operative Societies that the weavers were not loyal to their societies and that they went to the middlemen when trade was brisk and returned to the union when it was slack. It was, however, thought that the work of the societies could be made more useful by the formation of strong central societies in the chief weaving centres, by admitting to membership yarn and cloth dealers along with local primary societies of weavers.

Bombay.—In Bombay also co-operation started early among weavers. In 1916-17, there were 29 weavers' societies with a total membership of 2,260 and a working capital of Rs. 1·4 lakhs. By 1926-27 the number of societies rose to 59 and the membership to 3,090 and the working capital Rs. 3·3 lakhs. At first, only credit was supplied ; later, attempts were made for the bulk purchase of yarn by societies, but these were not attended with success. Other causes also hampered the progress of the movement. Members were too slow in repaying their dues, although the rate of interest had been only 9 per cent per annum as against 12 to 15 per cent charged by sowcars. There was also growing competition from *sowear*-weavers and mahajans. The weavers themselves were lacking in internal unity and they were too conservative to change their traditional methods and lines of production. Further, they had to fight against the growing competition of mills and small-scale powerloom factories, at a time when their markets were dwindling owing to a change in demand amongst the middle classes. Due to all these causes the progress of co-operation was slow in the Province.

United Provinces.—Attempts at co-operative organisations of weavers in the United Provinces began in 1906, when the Benares Silk Weavers' Co-operative Association was started. Owing to the prohibitive prices of silk dyes during the last war, the Association incurred heavy losses and had to be finally liquidated. Other primary societies, started in Benares, also came to an untimely end by 1923-24. In 1909-10, two co-operative yarn stores were organised, one at Tanda (Fyzabad District) and the other at Sandila (Hardoi District). The Tanda store had to face opposition from the richer weavers who kept out of it ; it was also inefficiently managed. The Sandila store was a distributive co-operative society, and although it passed through many vicissitudes it has managed to survive. Greater success, however, attended certain later ventures in the co-operative line, *e.g.*, the Industrial Co-operative Store at Agra started in 1927-28, and the Mason Industrial Co-operative Society Ltd., Barabanki, started about the same time. These two had a chequered career for want of expert guidance and proper marketing arrangements. On the whole, weavers' co-operation was a failure in the United Provinces and this is attributed to lack of capital and inadequate attention paid to marketing facilities.

Bihar.—In 1914, the Registrar of Co-operative Societies, Bihar, started two weavers' stores one at Bhagalpur for silk weavers, and the other at Ranchi for cotton weavers. Other societies were also started among weavers for supplying credit. Both these began well but after a few years' working they failed, causing heavy losses to the Co-operative Central Banks which had made loans to them. Societies started at Darbhanga and Bihar Sharif, for supply of yarn to weavers, also shared the same fate.

Bengal.—In Bengal, weavers' co-operation began only after the Indian Industrial Commission Report of 1918. A large number of weavers' primary societies were organised in well-known centres where the co-operative credit movement had already made some headway. The primary societies did nothing beyond giving cash loans and as there was no efficient supervision the loans were not always used for the purpose for which they were taken. Therefore, overdues mounted up and the societies did very little for the improvement of handloom weaving.

Central Provinces and Berar.—In the Central Provinces and Berar the earlier societies of weavers were mostly engaged in giving loans to weavers and did nothing else. As there was no hold on the weavers taking loans, repayment fell into arrears and many of the societies failed eventually. The only successful society worth mentioning is the Basim Weavers' Co-operative Society (Odhyogin Vinkar Mandal) in Berar. Its success has been largely due to the loyalty of members and the fact that from the beginning the society has conducted its yarn sales on cash.

Thus in spite of the efforts undertaken for over three decades the co-operative movement was a failure in most parts of India. And even where it had not altogether failed the scope of its work was very limited. The principal cause of this failure was that it was not built on proper foundations. It was generally believed at the time that all that the weaver wanted was capital and it was thought that so long as that was supplied everything would go on well with him. But the real problem of the weaver then, as now, was the lack of marketing facilities which forced the weavers to continue in their pathetic dependence on *sowcar*-weavers and merchants for the supply of yarn and for the sale of finished goods. The weavers were illiterate and improvident. They were too conservative to learn any new lessons. There was no mutual trust among them and they were liable to be influenced by self-interested middlemen. The period was one of growing competition with the mills and powerlooms, and the market for handloom goods had been dwindling. Nor was the management of the societies efficient. There was a lack of leadership among the weavers and those of them who came forth to lead were middlemen whose private interest often collided with the interests of the society. There were indeed disinterested outsiders willing to help the weavers but they had neither adequate technical knowledge nor business experience. As the Industrial Commission (1918) observed, "the main difficulty in the organisation of industrial societies for any purpose which involves dealings on a large scale,—the sale of piecegoods, for instance,—lies in the absence of persons of intelligence and standing acquainted with the business, whose interests are yet not necessarily opposed to the success of the scheme." However, owing to the co-operative activity mentioned above a certain amount of awakening came about among the weavers and they felt the need for common efforts. Some improvements had also been made in the tools and appliances

of weavers and these whetted their appetite for further advance in that line. But the severe economic depression passing through the country greatly affected the handloom weavers, and some active external stimulus was necessary to rouse them to activity again. Such a stimulus was supplied by the grant-in-aid from the Government of India announced in 1934.

157. *Government of India Grant—Its distribution.*—The circumstances which led to the Government of India sanctioning a grant-in-aid for the handloom industry have already been dealt with in Chapter I. After the decision about the grant was announced, the first question that had to be considered was the basis on which the grant should be distributed to the various Provinces. This question was discussed by a Sub-Committee of the Sixth Industries Conference held at Simla in July 1934. Among the criteria for the distribution of the grant between the various Provinces were (i) the number of handlooms, (ii) the amount of yarn consumed, (iii) the number of handloom weavers in the Province and (iv) the expenditure by the local Government on handloom weaving. After some discussion it was decided that for the first year one-half of the grant should be distributed in proportion to the amount of yarn consumed in each Province, and the other half in proportion to the actual expenditure of each Provincial Government on cotton handloom weaving. Certain other criteria were also suggested, *viz.*, (i) the degree of success attained by the Provincial Government, and (ii) the extent of competition to which the hand-weaving industry in the Province was subjected; but both these suggestions were dropped as they were considered unworkable. This question was further discussed at the Seventh Industries Conference held at New Delhi in October 1939, and it was finally decided that the basis adopted for the first year was on the whole more suitable than any other, and that only these two criteria should be followed for the remaining years of the five-year period. It was also decided in 1934 that 15 per cent of the grant should be retained for contingencies and for grants to minor administrations, and especially to increase the grants of those Provinces which owing to special reasons had received unfavourable allotments under the agreed basis of allocation. The grant was given only for five years in the first instance. In 1939, the scheme was extended up to 31st March 1942.

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The total amounts of the grant-in-aid received by the different Provinces are given in the table below :—

TABLE LXX.—*Distribution of grants among the various Provinces.*

(In Rs. 1,000.)

Province.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40(e).	1940-41(e).	TOTAL.
Madras .	26·5	59·5	68·8	68·8	68·8	71·2	70·7	4,34·3
Bombay (a) .	17·5	39·5	39·0	39·0	39·0	40·4	40·1	2,54·5
Bengal . .	35·5	80·0	96·0	96·0	96·0	99·4	98·7	6,01·6
United Provinces	32·0	72·0	116·4	86·4	86·4	89·4	88·8	5,71·4
Punjab . .	17·0	38·0	45·6	45·6	45·6	47·2	(i)65·6	3,04·6
Bihar and Orissa (b).	23·0	62·5	41·8	45·8	(d)54·8	(f)52·7	47·1	3,27·7
Central Province and Berar.	7·5	17·0	20·4	24·4	24·4	(g)35·3	25·1	1,54·0
Burma(c) .	7·5	17·0	20·4	..	..	..	..	44·9
Assam . .	7·5	17·0	20·4	24·4	24·4	25·3	25·1	1,44·0
North-West Frontier Province.	..	5·5	13·5	7·3	5·4	5·6	5·6	42·8
Sind . .	..	..	8·4	12·4	12·4	12·8	12·7	58·8
Orissa . .	..	..	0·4	13·4	13·4	13·9	13·8	63·8
Delhi . .	2·0	5·0	6·0	6·0	6·0	(h)6·9	6·9	38·8
Association for the Development of Swadeshi Industries, Delhi.	..	7·5	..	..	..	..	..	7·5
TOTAL .	1,76·0	4,20·5	5,06·1	4,69·5	4,76·6	5,00·0	5,00·0	30,48·7

N.B.—(*a*) Includes Sind up to 1935-36.
(*b*) Orissa separated from 1936-37.
(*c*) Burma excluded from 1937-38.
(*d*) Includes a non-recurring grant of Rs. 9,000.
(*e*) Including *pro-rata* shares.
(*f*) Includes additional grant of Rs. 5,300.
(*g*) Includes additional grant of Rs. 10,000.
(*h*) Includes additional grant of Rs. 720.
(*i*) Includes additional grant of Rs. 20,000.

158. *Utilization of the grant.*—In conformity with the object of the Government of India, the Provincial Governments put up schemes for the utilization of the grant. The schemes thus proposed and approved were : (i) improvements in the marketing of cloth, (ii) facilities for the supply of yarn, dyeing materials and accessories to weavers at reasonable prices, (iii) improvements in productive technique and training by the appointment of experts in weaving, designing, dyeing and printing, so that the cost of production may be lowered and goods of new patterns and qualities likely to command an easy sale may be produced, and (iv) facilities for the proper finishing of handloom products.

There was, however, no uniformity between the Provinces in regard to the mode of utilization. In some of the Provinces the grant was administered by the Director of Industries and in others by the Registrar of Co-operative

Societies, but in many of them a new organisation was set up for this purpose with a strong committee consisting of the Director of Industries, the Registrar of Co-operative Societies and other officers concerned with the matter. We will now see how the grant was utilised in the different Provinces.

In Madras, the grant has been administered through the Provincial Handloom Weavers' Society at Madras. The management of the Society vests in a Board of Directors with fifteen members, of whom the Registrar of Co-operative Societies the Director of Industries and Commerce and the Principal of the Government Textile Institute are *ex-officio* members. It was first contemplated to make the Director of Industries and Commerce the administrative officer for the grant, but later the control was transferred to the Registrar of Co-operative Societies. The staff of the Industries Department are always available for technical advice. The Provincial Society was established in 1935 with an authorised capital of Rs. 5 lakhs. The number of primary societies affiliated to it was only 40 in 1935, but the number has since grown to 181. The Provincial Society arranges for the supply of yarn to the primary societies from mills at wholesale prices on its own guarantee. Cash loans are also granted to the Societies for the purchase of yarn directly from the bazaar when such purchases are found more profitable. The Provincial Society also helps the primary societies by sending round its expert designers, by maintaining several marketing officers and inspectors and by giving them marketing facilities at its many sales emporiums. The calendering plant maintained at Madras has not been adequately used owing to many causes, but the dyeing factories located at different centres are a source of help. The number of weaver members now stands at 12,840.

In Bombay the scheme is controlled by a Joint Board comprising the Director of Industries and the Registrar of Co-operative Societies. The former is the administrative officer in charge of the grant. There is also an Advisory Committee of which the Director of Industries is the Chairman, and the Registrar of Co-operative Societies, the Managing Director of the Provincial Co-operative Bank, and two non-officials engaged in the piecegoods trade nominated by the Government, are members. The Marketing Officer for handloom products is the Secretary of the Committee. Nine Industrial Co-operative Associations have been organised at leading centres, *viz.*, Ahmedabad, Dhulia, Malegaon, Yeola, Ahmednagar, Sholapur, Bagalkot, Hubly and Belgaum. These Associations have been asked to engage generally in the production of fabrics different from those commonly produced in the localities. The fabrics thus selected are shirtings, coatings, dhotis, towels, *chaddars*, counterpanes and furnishing material. The Associations obtain orders from the Central Board and from others, and sales are effected locally and through a sales depot in the Bombay City financed from the Government grant. It was expected that the weavers working under the Associations would take up the manufacture of new patterns of cloth and thus obtain better earnings. Bombay has also three Associations for the wool weavers under the Wool Scheme of the Government of India. Under this Scheme weavers are to be taught the scientific methods of sorting and grading wool, blending and mixing and other processes. Ahmednagar is an important centre of this manufacture and a well-equipped dyeing house has been set up there.

In Bengal, a Provincial Industrial Society has been started at Calcutta with nine Central Industrial Unions functioning in the various areas with a

large number of primary weavers' societies affiliated to them. The Registrar of Co-operative Societies administers the great bulk of the Government of India grant. The principal aim in Bengal is to train the weavers in improved methods of weaving and dyeing, to give facilities for marketing and to improve the quality by standardization and by the use of better designs. The distribution of raw materials at cheap rates is also one of the objects. A small portion of the grant is given to the Director of Industries, and this is utilized for research work in the Bengal Textile Institute, Serampore.

In the United Provinces, the Department of Industries has been administering the grant. At the outset, a part of the grant was utilised for a survey of the handloom industry and for the collection of samples.. The Department of Industries has also started an emporium, called the Government U. P. Handicrafts at Lucknow. The other purposes for which the grant has been utilized are for the production and supply of designs, research and experiments to evolve appliances and solve the technical problems of the weavers, supply of improved appliances, production according to specification and introduction of new designs, grants of working capital to societies and associations, improved finishing by machinery and hand-appliances, and marketing by means of commercial travellers. It was perhaps thought to have a central marketing organisation and wholesale buying agency, but this has been subsequently abandoned in favour of subsidised wholesale buyers or agents. Although there was also provision for financing through co-operative societies, co-operation is only remotely in the picture. Marketing is chiefly undertaken by the Government emporia at Lucknow and other centres.

The objects of the scheme in the Punjab have been the introduction of improved looms and appliances, new designs, fast colours, improvement of finishing processes, helping in the marketing of goods, and intelligent recording of weekly rates of raw materials and finished goods. The Industries Department supplies raw materials, gives advances to weavers through agents at different centres and the produce is stored at the sales depots the chief of which is at Amritsar. Marketing Officers have been appointed under the Scheme for supervising the work. The Department has also given indirect assistance by organising exhibitions, maintaining show rooms, by giving subsidies to co-operative societies and others. In the Punjab as in Bombay, a grant has been given also for the woollen industry.

In Bihar, the grant is administered by the Director of Industries and the central feature of the scheme is the handloom marketing organisation called the Bihar Cottage Industries, which was started in April 1935, to serve the needs of the combined Province of Bihar and Orissa. Improved appliances had already been popularised by the Department, and therefore the grant has been used chiefly for the introduction of new patterns, designs, inspection, purchase and finishing of fabrics, and for marketing them through commercial sales depots, commission agents, etc. Special attention was paid to the manufacture of furnishing material, and great success was attained in it. Fabrics from the Bihar Cottage Industries at Gulzaribagh have been sold in the United Kingdom, Australia and New Zealand. The central organisation has been distributing orders both to weavers' societies and to master-weavers No subsidies have been paid to the weavers societies; nor was this considered a suitable method.

In the Central Provinces and Berar, the grant is administered by the Department of Industries, through the Central Weavers' Co-operative Society at Nagpur, its branches and similar societies in certain other centres. The object of the Central Society are to purchase, stock and supply yarn and other raw materials, to improve the moral and material conditions of the weavers and to inculcate habits of thrift, self-help and co-operation among the weavers. The Central Society at Nagpur has kept before itself two aims, *viz.*, the production of standard goods and the marketing of the goods made under the scheme whether at Nagpur or elsewhere.

In Sind, the grant has been utilised for the supply of improved appliances on hire purchase system or otherwise, supply of raw materials, popularisation of new patterns and designs, undertaking preparatory and finishing processes, and acceptance on consignment basis of handloom products against partial payment and the sale of the same.

159. *Financing methods.*—There was no uniformity in the financing methods followed in the execution of the scheme. In Madras, the Provincial Handloom Weavers' Co-operative Society is not able to meet all the financial needs of the member societies; but it makes arrangements for their raising accommodation from the District Central Banks. These Banks were at first reluctant to finance the weavers' societies. However, this was soon overcome in some of the districts and ample accommodation has been forthcoming. There has been some difficulty in regard to the nature and adequacy of the security which the co-operative societies could give, and, therefore, until the marketing business is brought under a regular system, there may be obstacles to raising bank credits. Some losses were incurred and that was due to the fact that some of the societies, being of recent origin, were lacking in experience. In Bombay, the co-operative associations have been authorised to borrow, subject to a limit of twenty times the owned capital, but actually there are difficulties in raising even twice the amount owned. Bad debts incurred are negligible, nor are the losses incurred considerable. In Bengal the industrial unions which were selected for the operation of the grant were already working at a loss. But after the grant was received the financial position of these unions has improved. Some of the older unions had to be wound up and new unions were formed in their place, so that they might begin their operations with a clean slate. Therefore, no loss has been incurred nor bad debts. In the United Provinces, according to the report of the Director of Industries, no difficulty has been experienced in getting money through banks for any of the societies under the scheme. So long as the marketing system continues to work successfully, the Department has no fear about lack of support from the co-operative banks in the Province. In the Punjab, financing has been done neither by the Co-operative Banks nor by the Government. The working capital is provided by buying agents, but the Director assures that no profiteering has been allowed at the expense of the weaver. Prices and wages are fixed by the Marketing Officer and the interests of the weavers are always kept paramount. In Bihar, the grants have been utilised directly through the Bihar Cottage Industries organisation, as, judging from past experience, it was not thought advisable to entrust the weavers' societies with any funds. Therefore no bad debts were incurred nor any losses sustained. In Orissa the weavers' societies depend on cash credits from central banks.

160. *Extent of benefit.*—The estimates of the benefit conferred by the grant in the different Provinces also vary widely. Considering the meagreness of the funds spent in Madras, the work must be regarded as a great success. Goods worth Rs. 40 lakhs have been marketed during the six years ending with 1940-41. The Provincial Society of Madras complains about the competition that the new scheme has had to face from *sowcar*-weavers and mahajans. About 6,000 looms have come under the scheme. It is said that the weavers have been able to get more wages, and this is understandable seeing that the Government is doing the middleman's work without levying the usual charges. It is not clear, however, if the weavers are obtaining adequate employment; for, while the wages for the work done may be high, the total monthly receipts may not be high owing to lack of adequate employment. In Bombay, it is claimed that the weavers have been able to get yarn at lower prices, that new types of goods have been produced, that the cost of production has been reduced, and that there has been some reduction in unemployment. But the number of weavers who have come into the scheme is very small and there was great difficulty in marketing until the present war started. The report from Bengal is that there has been no appreciable benefit as the grant so far made is far from adequate. The report from United Provinces is the most encouraging of all. The Director of Industries of that Province speaks about the improvement in the general trend of the industry and a higher wage level: "New types of goods hitherto unknown are being freely made by all, as demand for these has been increased by our efforts and new raw materials which took years to filter down to the less forward centres are taken to, simultaneously with their introduction among our weaving centres. New hope has been inspired in weavers and we are now getting requests to start more development centres, whereas in the beginning the stores had to coax them to take up new lines or to make goods according to specifications.....Unemployment has decreased to some extent at the centres .....Further, we have instances to show that our scheme has saved many weavers from threatened unemployment due to fall in demand for their old type of goods.....A very recent instance is of Mau Ranipur where the weavers had burnt their looms in despair a year ago and are now making fancy shirtings, chaddars, etc." A general rise in wages and production of new patterns of cloth have been reported from other Provinces also. Even Orissa, and Central Provinces and Berar, which are the least optimistic in this matter, have admitted that the grant has paved the way for some improvement.

161. *The agency.*—When the grant was first mooted, the idea was to administer it through the co-operative societies. But at the Fifth Industries Conference held in Simla in 1933, representatives from some of the Northern Provinces expressed very unfavourable opinions about the co-operative agency. It was held by some that the co-operative societies would not be able to execute orders in time and that master-weavers and contractors would do the work better. Therefore, the original intention had to be modified, and discretion was given to the Provinces in the utilization of the grant. Only some Provinces chose the co-operative agency for carrying out the work. The object of the grant, however, is to train the weavers to carry on their business more profitably. This object cannot be fulfilled merely by giving some of them more work temporarily even at a higher wage. The more

important question is how the orders are executed and whether the methods employed will enable the weavers eventually to obtain the same results without Government aid. It is generally assumed that the grant is to be utilized for the improvement of the working weavers as distinct from the *sowcar*-weavers. But *sowcar*-weavers have been employed in several Provinces in the working of the scheme. In Bihar, for instance, it is learned that the orders of the Bihar Cottage Industries are executed largely through such an agency. A certain wage rate is indeed insisted on and it is also claimed that Government's insistence on these wage rates has raised the wage level in the industry as a whole in the locality. Even so, one has to watch if this results in any permanent benefit to the working weavers. Even in Bombay, where the co-operative method has been adopted, work is proceeding through middlemen in one of the important centres. In Madras, on the other hand, the aim is to eschew the middlemen altogether. No doubt, this has resulted in some opposition from the powerful class of *sowcar*-weavers, but such opposition has not affected the movement seriously so far. However, when the movement grows from its small beginnings, the position may be different. We are here up against a serious problem, and a decision will have to be made sooner or later in this difficult matter.

It is thought by some that although the societies should be conducted in the interests of the working weavers only, there is considerable advantage in utilizing professional merchants in the marketing transactions. Frequent shifts of fashion have been going on especially in women's clothes and the ordinary weaver will not be able to keep pace with them unless some one with intimate knowledge of the trade advises them on what to produce and supplies patterns to them. It is also thought that sales through experienced merchants would be more advantageous than direct sales. In the opinion of some, therefore, the association of some leading cloth merchants in the work of the societies would result in great advantages. It is believed that the societies which now obtain the guidance from such persons in one way or another are faring better.

Only in a few Provinces was the grant administered through the co-operative organisation. Owing to its educative value, the co-operative method is generally regarded as the best fitted to give the weavers a training for self-help, and therefore this side deserves greater attention. Among the Provinces which utilized the co-operative agency, Madras has perhaps attained considerable success in the administration of the grant, judging from the statistics supplied. The comparative success of Madras is due partly to the vitality of the co-operative credit movement in that Province and the spade-work done by the weavers' primary societies in existence before the scheme was put into operation. It is also due to the close co-operation between the mills and handlooms. The great majority of the mills in Madras are not engaged in weaving and their interests are in most ways identical with those of handloom weavers. Dewan Bahadur C. S. Ratanasabapathy Mudaliar, C.B.E., President of the Southern Indian Millowners' Association, is himself the President of the Madras Provincial Weavers' Co-operative Society, and Mr. J. M. Doak, the Managing Director of the Madura Mills (the biggest single supplier of yarn in India to handloom weavers) is an active member of the Managing Board. In Bombay also, several industrial associations have

worked well, thanks largely to the disinterested labours of experienced Leaders like Rao Bahadur G. K. Chitale, of the District Co-operative Association, Ahmednagar.

162. *Lines of improvement.*—While it is true that a good beginning has been made, it is well to admit, as most of the Provincial authorities have admitted, that only the fringe of the problem has been touched. Although wages per unit of labour have slightly increased, there is no evidence that fuller employment has been secured or that monthly earnings have increased. Only a very small proportion of the weavers have been brought into the movement and even the best societies may not be able to work successfully if the Government grant is withdrawn. There is besides the growing competition from middlemen especially in some of the more important areas. Our object must be to place the movement on a self-supporting basis as early as possible. The weavers must be given regular work so that they may have higher monthly earnings, and they must be enabled to live a better life than now. If these objects are to be fulfilled, a planned system of production and marketing is essential. In order that fuller employment may be secured for a large number of weavers, more abundant orders are required, and orders will only increase when goods of the quality needed are produced at reasonable cost and marketed at the right time and place. The quality, quantity and timing of production must, therefore, be carefully planned for every area in which the co-operative movement is operating. The human and technical resources of each centre must be fully utilised for the production of such goods as could be produced there most efficiently. Further, each type of commodity should be produced in such quantities as could be marketed within a reasonable time. The production of speciality fabrics like furnishing material may bring in decent profits, but the production must be carefully adjusted to demand. The proper timing of production is also equally important. In most parts of India, there are certain seasons when the common people make their purchases; *i.e.*, the months when marriages are conducted and on the eve of important festivals like the Pooja and Deepavali. Goods suited for these occasions will have to be made beforehand in such quantities as are likely to be required, and this again can only be decided by a proper survey of the markets. If production is timed in this manner and if the sales are also properly regulated, not only will the business of the societies increase but they will also be able to easily get accommodation from the Co-operative Central Banks and even from commercial banks.

In regard to marketing, one or two points call for special attention. Firstly, the price policy adopted by the societies has not been carefully devised. The selling price is generally fixed at cost price *plus* some margin of profit for the society, but this policy is not conducive to business success. Commodities will have to be sold at the market prices current and the losses incurred in some periods will have to be made good by the profits accruing in other periods. It has been pointed out to us that a better principle for settling prices would be the "cost of replacement *plus* margin," which would approximate to the sale at the current market price. It is also said that under the present system of pricing some self-interested persons who are connected with the movement are able to make unjust profits. In some Provinces (*e.g.*, Bihar), we find that the profit realised by the Government organisation on various types of fabrics is higher than what the mahajan is able to make in similar

transactions. This indeed indicates that by earning such handsome profits the Provincial handloom organisation may soon be able to outgrow the need for subvention from the Government of India. We, however, wonder if the purpose of the grant is properly fulfilled by such a policy.

It is also necessary to utilize the co-operative movement more fully for the sale of handloom cloth. The co-operative stores throughout India must be encouraged to actively help in this matter. In other words, the two sections of the co-operative movement must work in active co-operation.

It is held by some that the weavers could be given a useful training if they are brought to work in *karkhanas*. They are generally unpunctual and do not always stick to the patterns given to them. If they work in a *karkhana*, it is said, these defects can be rectified and the weaver can be brought under discipline, which is much required as things now are. Many persons think that the success of hand-weaving in Sholapur is due to the training given to the weavers in the *karkhanas*. They, therefore, express the opinion that the co-operative societies must maintain workshops where the orders will be executed. The *karkhana* has indeed certain advantages in regard to standardization, punctual delivery of cloth, etc. But the cost of production is bound to rise, when a workplace is to be maintained and supervision provided for. There are, however, other aspects of the matter which will be discussed in Chapter X.

163. *Indigenous co-operative institutions.*—There is a growing opinion all over India that co-operative societies are not likely to be helpful to the weavers. It may be that the co-operative societies registered under the Act have shown rather disappointing results, but this may be due rather to the way the societies have been constituted or conducted; the co-operative principle cannot be blamed for the faults resulting from its misapplication. The co-operative method has already been in use in some way or other in the caste guilds of the weavers in the past, and if the new co-operative method had been grafted on this traditional growth it might have worked better. We have got indications that the old caste guilds could be utilised for other and more practical uses than for collecting funds to maintain temples and celebrate festivals. There have been attempts at various places in India (*e.g.*, Ahmednagar, Nagpur, Chaumuhani) for a proper utilisation of the indigenous co-operative institutions. One of the earliest of the experiments in this direction was made by the Padmasali weavers of Ahmednagar in 1917. At that time these weavers had to pay various charges amounting to 2 to 3 annas per rupee when selling their cloth. The weavers, therefore, joined together into a society called the Chhap Committee with the object of effecting sales in a more orderly and less expensive manner. At first, the society forbade its members from selling cloth directly to the merchants and had all the cloth brought to its warehouse where a *chhap* (stamp) at a charge of 1 pice per sari was fixed. The merchants, therefore, had to go and purchase the cloth at the society's warehouse and had to forgo the commissions which they were formerly charging. The advantage of such co-operative action was fully realised, and the whole community worked together in this effort. It is true that subsequently the cloth was again sold directly to the merchants by the weavers, but the society insisted that only cloth with the *chhap* should be accepted and the merchants had to agree to this. Although this was the prime motive for starting a society, it has subsequently developed various

social and ameliorative activities connected with the maintenance of schools, libraries, etc. The production of cloth has diminished in Ahmednagar (as shown in the last Chapter); the Chhap Committee, however, still continues its beneficial activities.

In Nagpur, the Koshtis who form the great majority of the weavers have set up an organisation called the Koshti Hitakarini Mandal with economic and social purposes in view, and nearly 80 per cent of the Koshti weavers have joined it. This society has also a regular system of stamping, and it has been insisting, fairly successfully, that only cloth bearing its stamp should be purchased by the shopkeepers. For this purpose a hundred supervisors have been appointed by the Mandal, each in charge of a division. The supervisor fixes the stamp at a charge of one pice; of this one-half goes to himself as his remuneration for the work, and the other half to the Mandal funds. The monthly income of the Mandal under this head is Rs. 300 to Rs. 400. In this way the society has collected a fund which is utilised for financing needy weavers who are unable to sell their finished goods. The Mandal advances money on the pledge of finished goods and no interest is charged thereon. This system has been working since 1936 and has given to the Mandal some control over the marketing of the cloth woven by its members. The Mandal also takes interest in the social and educational welfare of the community. It is thus, in the real sense, a guild and a co-operative society rolled into one.

In most parts of India there are associations for securing the social and economic interests of the weaving communities and although they do not fix any stamp on finished goods, some help is rendered about the marketing also. Such associations exist in some parts of Bengal and Madras. In Chaumuhani (Bengal), the large weaving community of Naths has an organisation called "Nath Samity," which not only discharges the usual social and religious duties but also helps in the marketing of cloth. It supplies marketing information by maintaining a bureau whereby Naths could always be in touch with the ruling prices. Associations of a more or less similar type are functioning in Salem, Aruppukottai, and other centres in the Madras Province. At Ambasamudram, there used to be an association which even controlled production and regulated wages, but it has ceased to operate. In Sholapur each of the economic groups composed of the weaving community has its own organisation, as has been shown in Chapter IV.

Such indigenous co-operative institutions are in conformity with the genius of the people, and in our opinion it would be wiser to build on them than to set up separate organisations on an exotic model. While agriculturists have few such indigenous organisations, weavers and other handicraftsmen have them and those are still working among them. It is true that there are factions and internal rivalries in most weaving communities but these can be kept under check by making careful arrangements. In many localities, benevolent outsiders, working as Presidents or Patrons, have been effective in keeping factions under control. Where such traditional guild organisations have decayed efforts must be made to revive them. The guild system is known to handicraftsmen throughout the world and it has on the whole served them well. It must be pointed out, however, that in

centres like Sholapur, where distinct economic groups have been formed within the weaving communities, owing to the presence of many strata of middlemen, organisations of a different character will have to be formed.

163(a). *A business basis.*—We may now conclude this brief survey of the working of the Government of India scheme in aid of the handloom industry. There is no doubt that the grant from the Central Government was a timely move; it has laid the foundations of an organisation which, if properly nurtured, will be a great asset to the hand-weaving industry. We have now reached a stage at which the work must be done strictly on a business-like and commercial basis. We are afraid that ordinarily Governments have neither the time nor the equipment for business. What is now needed, therefore, is the active association of business men of proved ability and character. It may be noted that where business men have some control over the working of the grant (as in Madras), substantial results have been achieved. We, therefore, suggest that the next step must be the establishment of an all-India organisation for co-ordinating the scattered efforts going on all over the country, and in particular for expanding the markets for handloom products. A scheme for such an organisation will be considered in Chapter XI. This would involve larger expenditure, but we consider it worth while.

CHAPTER X.

The Present Position and Prospects of the Hand-weaving Industry.

164. *Total production as index of hand-weavers' prosperity.*—We have in the foregoing Chapters brought together facts relating to the production and marketing of hand-woven cloth and the competition that has been going on between it and mill-woven cloth. We have also analysed the nature and structure of the hand-weaving industry and have given an account of the yarns used and the cloths woven on the handlooms. Attempts at aiding handloom weavers by Government and by co-operative bodies have also been dealt with. It now remains for us to take stock of these developments and make a general estimate of the present position and prospects of the hand-weaving industry. This will be discussed in the present Chapter. It is also necessary to deal with the proposals placed before us in the fifth term of reference regarding the advisability of imposing restrictions on mills in respect of lower counts of yarn. This will be dealt with in Chapter XI.

It has often been argued that as the production of handloom cloth has increased, the hand-weaving industry must be considered to have prospered. This view needs careful examination. The following table summarises the trends of handloom production *vis-a-vis* mill production in three typical quinquennial periods from 1901 onwards :—

TABLE LXXI.—*Progress of mill and handloom industries (1901-1939).*

Average for	Mill Production.			Handloom Production.		
	Mill production (million yards).	Proportion to total production in India.	Proportion to total cloth available for consumption.*	Handloom production (million yards).	Proportion to total Indian production.	Proportion to total cloth available for consumption.†
1. 1901-02 to 1905-06	593	40%	14%	906	60%	26%
2. 1921-22 to 1925-26	1,805	66%	41%	948	34%	24%
3. 1934-35 to 1938-39	3,433	71%	61%	1,304	29%	25%
Percentage increase in production from the first to the last quinquennium.	479%	..	..	54%	..	..
Percentage increase in production from the 2nd to the 3rd quinquennium.	90%	..	..	47%	..	..

*For the purpose of this column, only retained mill production has been taken into account.
†Exports of handloom cloth not known and hence not deducted from the total handloom production.

We may see from the table that handloom production has increased by 54 per cent between the first and the third quinquennium (1901-05 to 1934-39) and between the second and the third (1921-25 to 1934-39) by 47 per cent. From the figures no reliable conclusion regarding the prosperity of the hand-weaving industry can be drawn. The statistics of handloom cloth, including those given by us in this Report, are necessarily subject to many limitations which impair their value for purposes of comparison. All these

statistics are drawn up by using the "residual" method, whose defects have been referred to in Chapter III. Owing to our imperfect knowledge of the amount of yarn used up by the rapidly growing hosiery factories and power-looms, and more important still, the changing trends in the unsold stocks of yarn, the figures of handloom production which are now available are, quite possibly, progressively overestimated. Further, it is well-known that especially in the less developed areas, much more of hand-spun yarn was used by handlooms in the earlier years and, therefore, our estimate of the total production on the handloom from mill-spun yarn alone gives altogether a wrong impression, by minimizing the production of the initial year and thus exaggerating the percentage of increase.

Even assuming that the statistics used are fairly reliable, there are various factors which have to be taken into account in drawing conclusions on them. In the first place, we have to remember in this connection that the decline of the handloom industry began a hundred years ago, and the fact that there has not been any further decline since 1900 does not bring out the whole truth. Till about the middle of the last century, the hand-weaving industry supplied all the textile requirements of India, and carried on a flourishing export trade besides. After 1840, these preserves were invaded by foreign imports and by 1900 only a fourth of the total Indian market in cotton textiles was left to the handloom. The result was unemployment among the growing population of professional weavers, and a drastic fall in their wages; many of them gave up weaving and as nothing else was available became unskilled labourers. Thus the initial injury came from the imports. Subsequently, the Indian mills took over a good proportion of the market previously supplied by the imports, and certain favourable circumstances have also enabled them to supplement it in some lines, as shown in Chapter VIII. Subsequently competition has come from powerloom factories and hosiery works also. The fortunes of the hand-weaving industry had already gone down to the bottom by 1900 with all the attendant consequences of such a decline, and if the production did not fall any further since, it only shows that some stabilization had taken place at the low level reached by 1900.

165. *Why production has increased.*—It is true that the handloom production has increased in some areas, especially in South India, but in several other areas, there has been a decline in production, and this is particularly true of many centres in Bombay and the neighbouring States, and also true to a smaller extent of Bengal. In areas where production has increased, it has been due largely to the substitution of fly-shuttle looms for throw-shuttle looms which has been going on in all the prominent handloom areas. The proportion of the fly-shuttle looms is 85 per cent in Madras, 67 per cent in Bengal, 55 per cent in Bombay and 47 per cent in the Central Provinces and Berar. As the average production of fly-shuttle looms has increased to 7 yards as against 4 yards on throw-shuttle, production per loom has increased by 75 per cent by this change. In these circumstances production has increased chiefly in those areas where fly-shuttle sleys have been introduced but in other areas production has very likely declined. Thus it would appear that the increase in production that has taken place in India must be largely due to the change in technique. This increase in production led to no improvement in the economic condition of the weavers, owing to certain peculiarities in the handloom economy, as will be shown presently.

166. *Increase of production no proper test.*—It may also be noted that in the case of a hereditary occupation like hand-weaving, increase of production cannot be a proper index of the prosperity of the industry. In this respect, hand-weaving in India is more allied to agriculture than to organised industries; in both cases, the number of people employed or the total production has little bearing on the profitableness of the concern. As stated earlier (paragraph 20), if a mill does not pay a reasonable dividend, it will be sold or scrapped and the millowner will put his money into some other more profitable industry. But if the hand-weaver does not get a reasonable return from his loom he may work harder and longer to make up by quantity what he loses in value. In fact, most hand-weavers will continue to ply the loom (as a mode of living) even if they get barely the price of yarn used in the making of cloth. Weaving is the only work known to them, and no alternative occupations are open to them. If they abandon this, they will have to take up menial work or live on alms. Such is the helplessness of most weavers, especially those belonging to the hereditary weaving castes. In these circumstances, no safe conclusion regarding the prosperity of the handloom industry can be drawn from the statistics of production. As the Hon'ble Sir Ramaswami Mudaliar pointed out at the Delhi Conference of representatives of mills and handloom industry, if increase of production were held to be the sole criterion of prosperity, the millowners might find themselves without an argument particularly with regard to proposals to lower the tariff. The cotton mill industry increased its production by leaps and bounds during the period under review and still it was faced with serious financial crises from time to time and had to seek tariff protection. As compared to the increase of 479 per cent in mill production between the first and the last quinquennium in the above table, handloom production experienced an increase of 54 per cent only. If then, the mills had still to supplicate for protection, the case of the handlooms is much stronger.

167. *Decline in total earnings.*—As the Tariff Board correctly stated in their Report, 1932 (p. 171), the only true criterion of the progress of the handweaving industry is the income of the weavers. The term "income" in this connection must be taken in two senses: (i) the total earnings of all the handloom weavers and (ii) the actual earnings of individual weavers.

In order to ascertain whether income has risen or fallen in the first of the above two senses, we have to find out *firstly* what the share of the handloom industry today is in the value of total cloth available for consumption in the country, and *secondly* whether that share has fallen or risen. In Appendix XXI and in paragraph 137, we have analysed the shares in the total consumption of cloth in India which can be attributed to imports, mill-made cloth and handloom production respectively. We have also stated in paragraph 137 that the millowners' contention that, so far as the volume of cloth consumed in India is considered, mills have replaced imports and not handlooms, appears to be *primâ facie* correct. From the point of view of the prosperity of the mill and handloom industries, however, mere volume of cloth is no test at all. What is more important is to consider the net total earnings of the two industries. Unfortunately, we have no adequate statistics to decide this question. We have indeed figures for the profits of cotton mill industry, which show a considerable upward trend from the last depression,

but we have no parallel figures for the handloom industry. The mill figures are calculated in the table below :—

TABLE LXXII.—*Profits of the cotton mill industry.*

Year.	Number of companies.	Profits (in Rs. lakhs).	Profits, same companies, preceding years (in Rs. lakhs).	Chain index Base (1928=100).
1928	58	123·0	..	100·0
1929	58	122·0	123·0	99·1
1930	58	46·7	122·0	37·9
1931	58	64·6	46·7	52·5
1932	58	101·9	64·6	82·8
1933	58	41·7	101·9	33·9
1934	58	110·9	41·7	90·1
1935	59	107·6	109·0	89·0
1936	59	117·9	106·5	98·8
1937	59	164·6	117·9	137·9
1938	57	249·8	163·8	210·3

In the above table, we notice a continuous upward trend in the figures for the chain index from 1933 up to 938 in the last column, which may be said to smooth out the figures so as to present a true picture of the position. There is reason to suppose that from 1938 to date, owing to the war, the profits have risen still further.

For the handloom industry, on the other hand, we have no reliable figures so as to present a chronological picture. From the available data regarding production, we find that the proportion of handloom cloth to the total cloth available in the country has been fairly well maintained, at 24 to 26 per cent, but this is no proof that the value has also been maintained, or that earnings accruing from such production have not declined. On the other hand, we have many indications to show that the handlooms' receipts from the total cloth bill of the country have not been maintained. We know, for instance, that in a large number of centres valuable fabrics which were formerly in wide demand have been replaced by plain cloth of much lower value. Numerous illustrations of this have come to our notice during the course of our enquiry and some of them have been given in Chapter VIII. The upper and middle classes all over the country were formerly decked in costly and elegant attire as becoming their social position : the saris used by the women of those classes cost anything between Rs. 20 to Rs. 200. In the case of those who wore *salwars* and *kurtas* also, the values were very high. As a result of the change in tastes, the same classes today wear saris or other alternative garments costing between Rs. 5 and Rs. 20, and even at marriages the use of the traditional garments has greatly diminished. Not that women have become less

extravagant; they still need expensive luxuries but their fancies have gone on imported fabrics like crepes, tafettas and georgettes. The demand for brocades, *kinkhabs* and other luxury fabrics has greatly gone down. A like change has come about in men's dress also. The lace-bordered dhotis and *angavastrams* and the costly *chaddars* and *pitambars* formerly worn by the well-to-do Hindus of all parts of India, cost a great deal more than the plain mill-made dhotis they now wear. Men who formerly wore the stately turban costing Rs. 50-0-0 or more now don plain caps priced at Re. 1, if not less! All these changes have had devastating effects on the hand-weaving community. Convincing proof of this can be obtained by a visit to places like Dacca, Santipur, Murshidabad, Comilla and Bankura in Bengal, Bulandshahr and Sikandarabad in the United Provinces, Dholka, Poona, Yeola, Ilkal and Ahmednagar in Bombay, Paithan and Nanded in Hyderabad, Masulipatam, Kornad, Dharmavaram, Uppada and Adoni in Madras, Burhanpur and Umrer in the Central Provinces, Petlad in Baroda, Chanderi in Gwalior and Eraniel in Travancore. No doubt a few places like Madura, Coimbatore, Dhanyakali, Nagpur and Sholapur have shifted over to fabrics suited for modern requirements and thereby are maintaining their economic position to some extent; but, for every two places which have so adjusted profitably their lines of production, five have taken up something much less profitable or have even abandoned weaving and the erstwhile weavers now swell the list of menial workers. We have seen a great deal of such decay in the course of our tours, in many parts of India. Such distressed areas can be seen in parts of Bombay (Gujerat, Maharashtra) and some of the States adjoining as also in Bengal, Central Provinces and Berar, and even in Madras. In some of these areas, we have found half-starved and ill-clad men and women coming out of untidy dwelling places, and the only evidence of their past prosperity still left is the local temple. In many places the weavers have taken to professional begging and there are still current proverbs in some of the Indian languages indicating this change. Another evidence of this decline is the large increase in unemployment and under-employment that has taken place among the weavers. This has already been referred to in Chapter IV. Generally weavers have no work for more than about six months in the year, and even during those months employment is unsteady and irregular.

The main point that arises out of the above discussion is that it is incorrect to construe the increase in handloom production as necessarily implying an increase in the total value. It is clear that if the quality of handloom cloth sold has fallen (notwithstanding some improvement in counts) to the extent described above, then the total value could not have increased. We have seen in Table LXXI that the volume of handloom production between the first and last quinquennia mentioned therein increased by 54 per cent, only. We doubt very much if the value per unit of handloom cloth sold has fallen by less than 35 per cent, which is approximately the decline in prices necessary to keep the total value of the handloom cloth steady in the period. If the decline is more than 35 per cent in the average price per unit of handloom cloth, it is obvious that the total value of handloom cloth has fallen. The pace of the prices of handloom cloth is largely set by the prices of mill cloth. The prices of mill cloth fell drastically since 1930. If we superimpose this fact upon the changes in fashions which have been noted above we shall get some idea as to the measure of decrease in the total value of handloom cloth.

Total value by itself, again, is not a correct guide to the position of any industry. The main question is, as in the parallel case of the mills, have *net total earnings, i.e.*, total value minus total cost of production, risen or fallen ? We have no means to decide this question by reference to any actual figures, but we may mention here two relevant considerations. In the first place, as will be seen from the data given in the next paragraph, individual earnings have fallen very drastically in recent years, the range of percentage decrease being from about 40 to 80 per cent. At the same time, there is no proof to show that the weavers' (working) population has increased to any extent. This means that total earnings must have fallen very seriously. Secondly, it appears that while prices of mill-cloth have fallen, its cost of production has also fallen side by side. We cannot say the same thing of the handloom cloth, in whose case the prices, which are largely determined by the prices of mill cloth, have fallen much more than the costs of production. This means that the margin of profit between price and cost per unit of handloom cloth is very much smaller than that in the case of mill cloth. Hence, volume for volume, an increase in the production of mill cloth must mean a far greater rise in the earnings of mills than an increase in the production of handloom cloth does in the earnings of weavers.

168. *Individual earnings.*—Our concern is not so much about the weavers who have given up weaving and have been absorbed in menial and other occupations, but about those who still persist in their hereditary calling without obtaining a subsistence wage. A drastic fall in earnings has taken place among them during the last two decades. When the Tariff Board reported in 1932, it was found that wages had been rapidly going down ; since then the decline in earnings has gone on further in nearly all the weaving centres. We have collected data regarding wages and earnings from all parts of India, and for purposes of comparison with early years we have drawn upon the information contained in previous reports issued by Provincial and State Governments. In the following table, the monthly earnings of weavers in Madras, Bengal and Bombay (for which adequate data are available) in 1941 and at a previous date (mostly 1928) are given :—

TABLE LXXIII.—*Monthly earnings of handloom weavers in 1928 and 1941.*

Centre.	1928.	1941.	Percentage decrease.
	Rs. A. P.	Rs. A. P.	
Madras—			
Cudiyatham (N. Arcot)	25 0 0	5 8 0 to 10 14 0	67 (average)
Yemmiganur (Bellary)	14 0 0 to 15 0 0	9 0 0 to 10 0 0	34 (average)
Coimbatore	30 0 0	9 6 0 to 11 4 0	66 (average)
Sennimalai (Coimbatore)	17 3 0	7 5 0	57
Uppada (E. Godaveri)	15 0 0	7 8 0	50
Chirla (Guntur)	12 8 0 to 18 12 0	6 5 6	59 (average)
Mangalagiri (Guntur)	12 8 0 to 18 12 0	8 0 0 to 9 0 0	46 (average)
Mangalore (S. Kanara)	12 8 0	5 10 0 to 10 15 0	34 (average)
Kodumuru (Kurnool)	17 3 0	6 0 0 to 8 0 0	59 (average)
Tricheugode (Salem)	16 0 0	9 0 0 to 10 0 0	37 (average)
Salem Town	18 12 0	7 0 0	63
Rasipuram (Salem)	25 0 0	10 0 0	60
Tinnevelly Town	10 0 0	6 0 0	40

TABLE LXXIII—*contd.*

Centre.	1928.	1941.	Percentage decrease.
	Rs. A. P. Rs. A. P.	Rs. A. P. Rs. A. P.	
Bengal—			
Santipur	30 0 0 to 40 0 0	15 0 0 to 20 0 0	50 (average)
Rajbalhat	40 0 0 to 50 0 0	20 0 0 to 30 0 0	44 (average)
Bankura	16 0 0 to 24 0 0	7 0 0 to 10 0 0	59 (average)
Chittagong	20 0 0 to 25 0 0	7 8 0 to 9 0 0	63 (average)
Bishnupur	30 0 0 to 35 0 0	8 0 0 to 9 0 0	74 (average)
Bombay—			
Sholapur*—			
(*Pharaspeti* Sari) 30s × 30s	1 8 0	0 7 0	70
(Ilkal Sari) 30s × 30s	0 14 0	0 5 9	59
(Nipani Sari) 30s × 20s	0 14 0	0 7 0	50
(Maheshwari Sari) 60s × 40s	1 2 0	0 9 6	48
Bijapur*—			
Hustadi Jamadi	8 0 0	2 8 0	68
(*Tola Khan.*)	10 0 0 to 12 0 0	5 0 0	55 (average)
Sangamner*	1 4 0	0 4 0	80
Nasik*—			
(Maheshwari border sari)	2 0 0	0 6 0	81
(Fancy border Sari)	1 10 0	0 5 0	80
(Fancy silk border sari)	1 8 0	0 5 0	79
(Ilka) superior type)	2 4 0	0 10 0	72
Guledgud	15 0 0	5 10 0	63
Poona	20 0 0	8 0 0 to 10 0 0	55 (average)
Belgaum	12 0 0 to 20 0 0	6 0 0 to 8 0 0	56 (average)
Gadag and Bettigari	4 0 0	2 8 0	38

*The wages for these centres are taken from the Report of the Bombay Economic and Industrial Survey Committee, 1938-1940 (p. 99), and are-piece rates for the years 1925 and 1938 respectively.

Two points may be noted in the above table. Firstly, there has been a drastic fall in the earnings of hand-weavers throughout the country during the last ten or twelve years, and the fall in some cases is as high as 70 or 80 per cent. Secondly, the present earnings are extremely low and indicate that employment is far from adequate and that the remuneration received is meagre. In the course of our tours we were at some pains to find out the actual earnings of weavers and we found that the great majority of them get from 4 to 6 annas a day; that a few of the more skilled and more favoured weavers get 8 to 12 annas or even Re. 1 a day; and that the less favoured or less skilled one receive a wage of only 2 or 3 annas per day. We have to remember that this is the combined earning of the family in which besides the principal

worker at least another person also works, although part-time. Evidently the majority of the hand-weavers are receiving only the income of unskilled labourers. In spite of having considerable hereditary skill and owning in most cases the capital equipment required, the weaver is unable to make both ends meet. It has been argued that even in their present condition they are better off than the average agricultural labourer. In the absence of any accurate data of agricultural wages, we are unable to institute a proper comparison, but it may be pointed out that even if agricultural labourers get only 3 or 4 annas a day there are various incidental gains from agriculture which the weavers are not able to obtain. For instance, the agricultural labourer generally gets free lodging, a certain amount of food-stuffs, fuel and other family requirements more or less free, but the weaver has got to purchase all these from his meagre earnings and this makes a great difference between him and the agricultural labourer.

169. *Hand-weaving not a decaying industry.*—In spite of the unsatisfactory condition of hand-weavers in many parts of the country, it is not correct to consider hand-weaving as a decaying industry. This can be seen by an examination of the numbers engaged in the industry, by the substantial improvements in production lately carried out and by the profitable business pursued by certain sections of the industry which are properly organised. In spite of the decline in the numbers employed in the industry, there are today more than 2½ million workers engaged in handloom weaving and this cannot be an over-estimate seeing that there are as many as 2 million looms in the country. It is also estimated that a population round about 10 millions are still depending on this industry. The cotton textile industry employs only 430,165 workers of whom a considerable number are working in spinning mills, producing yarn for handlooms. Thus, although the mills are producing 61 per cent of the total cloth consumed in the country, they employ only a seventh of the total number of workers in the cotton textile industry, and the remaining six-sevenths are employed in the hand-weaving industry. The 2½ million workers engaged in hand-weaving maintain (including themselves) a population of about ten millions. If after a hundred years of mill competition the handloom industry is still able to employ such large numbers, certainly it indicates that the Indian handloom industry has a unique capacity for survival. It may be remembered that during this period the handlooms in nearly every other country have either disappeared or dwindled to a very small number. The virility of this industry is also indicated by the commendable adjustments made in certain centres in regard to the methods of production, designs, quality of work, etc. Not only fly-shuttle sleys but dobbies and jacquards have been introduced in many places, and substantial improvements in workmanship have also taken place. Nothing struck us more during our tours than the remarkable variety and taste exhibited by handloom fabrics produced in centres like Madura, Coimbatore, Nagpur, Dhanyakali and Santipur. It is quite clear that hand-weavers in certain parts of the country have been following the changes in popular taste and have adjusted their workmanship to modern requirements. Thanks to the use of chemical dyes in recent years, they are able to exhibit an innumerable variety of colours which was not formerly possible. Similarly in the sphere of coatings and shirtings which is generally regarded as belonging to the mills, many centres in Madras and some in the United Provinces and Bihar have

succeeded in producing certain popular varieties which are being sold at highly competitive prices side by side with the mill products even in cities like Bombay and Calcutta. In sari-weaving too, creditable adjustments have been made in the Madras Province, Nagpur, Dhanyakali and other places, and today the handlooms hold their own in the market for medium-priced saris. Madura saris, for instance, are sold all over India, and the powerlooms have not succeeded in producing fabrics similar to theirs. It may be that in many Bombay centres sari production has suffered owing to mill competition, but Sholapur with its creditable organisation and *karkhana* method of production is able to market large quantities of saris not only of the *old* type but also *patals* in which there is keen competition from the mills. Santipur has indeed suffered by the competition with finer mill saris but there is a distinctiveness about its saris which makes them still popular in spite of slightly higher prices, and any one who visits the Madhobdi *Hat* or the Howrah *Hat* in the busy season would be struck by the volume of the transactions as well as the beauty and variety of the cloths exhibited there. In the light of this it would be most incorrect to say that the handloom industry is decaying. It is certainly alive, and has been advancing in several centres, in spite of the many difficulties it has had to put up with. Unfortunately, however, this is not true of a good many areas where weavers have not made adjustments in production. At any rate, it is clear from the achievements of a few centres that the handloom can still hold its own if only the proper environment is created. We may cite here the oft-quoted statement of Sir Alfred Chatterton, *viz.*, that "the handloom weavers who have already achieved wonders in the age of machinery will be able to turn the tables on the powerlooms if but a fraction of the capital, energy and organisation were devoted to their trade, that have been expended in pushing the powerloom".

In view of all these circumstances we cannot agree with the author of the Bengal Census Report for 1931 which includes handloom weaving among the 'decaying' industries. In 1918, the Industrial Commission wrote: "There is no real ground for the belief that the cottage industries in India are in a decadent condition." Although many changes have since happened in the fortunes of the hand-weaving industry, we are able to say that this verdict even now holds good in respect of this industry in most parts of India.

170. *Favourable factors.*—We may now survey in brief compass some of the factors helping and hindering the handloom industry in recent years. The data available are not adequate for drawing up a proper balance sheet of the various factors in operation, but a few outstanding points may be outlined here. On the credit side there is firstly the techincal superiority of the handloom in the weaving of hand-spun yarn and mill yarn of low counts as also in weaving delicate fabrics using high count yarn with complicated designs, and cloth of striped and checked patterns. This has been already described in Chapter VI. In the case of some of these an advantage arises from the fact that the mills do not find it worth their while producing small quantities of certain fabrics for which the demand is necessarily limited. While the usual warp of the hand-weaver is about 40 yards and in a few cases up to 100 yards in length, the average warp of the mill is about 1,200 yards and warps below 600 yards are not economical for them. The shortness of warp enables hand-weavers to cater for variety to a greater extent than mills, and in a world like ours, variety in dress is a vital concern, especially among

the womenfolk. The short warp also enables the hand-weaver to develop new designs and to combine a number of colours in one piece. The great merit of high-class handloom fabrics is their distinctiveness and delicacy of workmanship. It is said that wealthy women in America are prepared to pay very handsome prices for the rough unfinished hand-woven cloth from India, because it has a uniquencss about it. And such is the human psychology all the world over. If the Parisian dress-maker has used this to her plentiful profit, there is no reason why the Indian hand-weaver should not tap such resources. Indian women also have always valued distinctive fabrics and although there has been lately a craze for simplicity and a glamour for the imported stuffs it is likely that the preference for the peculiar fabrics of the country may still be maintained. Another factor favourable to the handloom is the belief (based largely on fact) that hand-woven cloth is more durable and, therefore, cheaper in the long run. It is this belief that still goads the poor women in all parts of India to buy the dearer handloom cloth in preference to cheaper and more attractive mill cloth for their everyday wear. The preference for multi-coloured cloths has also been to the advantage of the hand-weaving industry. In most parts of India, women mostly wear coloured cloth, and among men, a large number of Muslims also wear multi-coloured cloth. Although such habits are now changing, under various influences, there are also factors like the high cost of frequent laundering which may sustain the demand for coloured cloth. As shirts and coats have come to stay among men, and as these garments are usually made of coloured piecegoods, it is likely that men at any rate will be wearing more coloured cloth in future. The existence of a large number of spinning mills, especially in Madura and Coimbatore, engaged in producing yarn and catering for the requirements of handloom weavers is also a favourable factor of great importance. Above all, the capital costs and running expenses of the handloom weaver are small, and he has not to worry about initial capital, depreciation, agency commission, insurance, godown rent, income-tax, excess profits tax, strikes and lock-outs and other cares which fall heavily on the mills and impair efficiency in many ways. Further, a handloom is suitable business for one family, and the man, wife and children have each their parts to perform in it without any great burden on any of them. Viewed in this way, the domestic handloom system is an ideal organisation.

171. *Unfavourable factors.*—On the other hand, there are also operating side by side certain unfavourable factors which recently, at any rate, have been rather potent. Firstly, there are the familiar difficulties in regard to yarn and marketing. Owing to the defects of the present system, the handloom weaver has to buy his yarn dear and sell his cloth cheap. Thereby he loses at both ends and finds it difficult to compete with the mills and small powerloom factories which obtain their yarn cheaper and are able to market their goods at lower cost. As shown in Chapter IV, this is largely due to the methods employed by middlemen under whom the weavers have to work. Secondly, in the case of independent weavers credit has to be obtained at a high charge, and this involves the handing over to the financier not only the weaver's profit but even a portion of his wages. There is no proper organisation in the country for supplying credit nor for marketing of goods, and therefore the hand-weavers' production cost is bound to be higher. The monetary burden of such disadvantages on the weaver has been explained in Chapters

V and VII. Thirdly, the ignorance and conservatism of the handloom weavers make them disinclined to adjust their lines of production and types of designs to suit modern requirements. Fourthly, under the stress of competition, whether from the mills or from other handloom centres, the quality of hand-woven cloth has deteriorated in certain places and consequently there have been complaints from consumers regarding dimensions, weight, ends and picks per inch, etc., as has been explained in Chapter VI. This not only hits the particular weavers resorting to these foolish devices, but injures the reputation of all fabrics of that class. Fifthly, not the least of these unfavourable factors is the growing preference for white washable saris among younger women, especially school and college students, as has been explained in Chapter VIII. In Madras where formerly women of the middle and upper classes never wore anything but coloured saris, there has been a tremendous increase in the use of white saris, mostly mill-made. Not only the preference for white cloth but the whole attitude of the younger womenfolk towards the older types of apparel and the acute craving for plain dress and studied meagreness of attire are heavy items on the debit side of the handweaving industry. Most of these factors are unfavourable to the handlooms and favourable to the mills, but there are also in operation certain other factors, like the tremendous growth in the demand for hosiery of all kinds, which work against both the handlooms and the mills. Nor can the future prospect be more roseate if these factors are continuing to operate at a quicker pace. Further, the large increase in the capacity of mill industry brought about by the war effort recently may also lead to low prices in the immediate post-war period and make the competition with the mill cloth more difficult than hitherto, unless steps are taken, as we hope they will be, to counteract such eventualities.

172. *Will the handloom survive?*—The ills of the handloom industry described by us in this report are the results of the unfavourable factors noted above, and if these factors continue to operate unimpeded it is certain that the handloom industry will eventually dwindle into a smaller size with all the undesirable consequences flowing from such an event. Hitherto the handweavers have survived by their readiness to suffer privations. When the competition of mill cloth compelled them to sell their goods at prices which not only deprived them of their profit but even butted into their wages, the poor weaver had to tighten his belt by accepting a lower standard of living. This process of tightening has been going on for long, and thus the income of the majority of the weavers has reached the botton line of subsistence and it cannot go any further. To quote Sir Alfred Chatterton, again : " the handloom weaver still survives today because there is no alternative open to him. ....he can easily hold his own for a long time to come.... since he is content to exist on but little more than the bare necessities of life ". Thus it has not been so much a question of the handloom industry surviving as of the handloom weaver himself surviving. We are afraid, however, that the margin between the price of raw material and the price of finished products in the case of the independent weaver and the earnings received by the weaver-labourer has fallen so low that it is doubtful whether even the bare necessities of existence are available to the weavers anywhere. We have not collected minute data regarding the weavers' economic and social condition, as this formed no part of our enquiry, but we have seen large masses of impoverished

men in various parts of the country. In spite of some increase in production, employment among weavers has been falling. This has synchronised with a steady growth of population among them and as all the added numbers could not be absorbed in their hereditary occupation, a further increase in unemployment has taken place, and many have joined the ranks of the destitute.

Such is the present condition of the hand-weaving industry in a large part of the country. Left to itself, the industry will perhaps dwindle down to the position of a small handicraft concentrating on the production of a few speciality cloths. This is what has happened in many other countries. Thus, to take the case of Japan, a country in which the small-scale industry is glorified, we notice that between 1923 and 1934 the number of handlooms engaged in the production of cotton cloth fell from about 150,000 to about 55,000, as stated by Uyeda and Minoguchi in their monograph on the *Small-Scale Industries of Japan* (p. 67). The decline in the number of handlooms engaged in the production of woollen cloth has been still more drastic. Thus whereas in 1923 powerlooms engaged in this branch of the textile industry were 47 per cent and handlooms 53 per cent of the total number of looms, in 1934 the percentages were respectively 99 per cent and 1 per cent (*Ibid.* p. 32). Thus even in Japan at present wherever handlooms are used for cloth production, they are only used for producing pattern goods for home consumption. In countries like the United States of America, the few handlooms that survive are also confined to the production of speciality goods like upholstery cloths, table linen, etc.

173. *Should the handloom survive?*—Why should not a similar change happen in India also? Some persons in this country favour such a change, as they consider that it would be futile to bolster up obsolescence. On the other hand, many reasons have been placed before us to show that such a development in India will be undesirable in the present state of things. The reasons, which are stated below, are weighty and need mature consideration.

In the first place, the handloom industry is, next to agriculture, the largest single industry in the country. It is the main occupation of several millions of people and for most of them there is no subsidiary occupation. Nor is hand-weaving a hand-maid to agriculture, but the sole occupation of a large class of people. It is the mainstay of many towns and numerous villages scattered all over the country. Although this industry is only responsible for about 25 per cent of the total cloth consumed in the country, it employs over 85 per cent of the textile workers of the country. In most countries which allowed the handloom to disappear, it was when a widening external market enabled workers to be absorbed in mills or other industries that the change-over came. On the other hand, if the Indian handloom industry collapses, the resultant misery is bound to be a serious problem for the country. It will involve the pauperization of a large population and this will become a heavy burden on the State. Many flourishing towns and extensive rural areas would thus be deprived of their bread and this may have ugly social as well as economic consequences.

Secondly, one of India's principal economic problems is the unemployment and under-employment of large masses of people. As a means of solving this problem, large-scale industrialization in India has so far been conspicuously

ineffective. Although this country today produces all our sugar, a large part of our requirements in cloth, iron and steel, cement and jute bags in power using factories, only about 1½ million labourers have been absorbed in all industrial establishments coming under the Factories Act. Had a good many alternative occupations been available in India, large-scale production of cloth would not have caused any great dislocation, but in the present state of things, we have to concentrate largely on occupations which call for a plentiful supply of labour while economizing on capital. As is well-known, labour is cheap and abundant in India, while capital is dear and difficult to mass together. In such a state of things, labour-using and capital-saving occupations have a special function to discharge. The handloom industry exactly fits in with such requirements.

Thirdly, a fundamental cause of India's poverty is the tendency to an unequal diffusion of purchasing power. This defect cannot be rectified by the expansion of factory industries unless large social and economic changes also take place simultaneously. But it can be greatly set right by a carefully regulated system of small-scale industries. Industries using hand-power distribute purchasing power more widely than large-scale industries. While the proportion of the wage bill to the total cost of production in mills is at the most 25 per cent, it forms about 40 per cent in hand-weaving with mill-yarn and nearly 75 per cent in hand-weaving with hand-spun yarn.

Fourthly, decentralized production even of the handicraft type is not so uneconomical nor so inefficient as is often assumed. Its advantages in the manufacture of speciality goods calling for distinctiveness are well-known. Even in regard to staple goods, handicraft can be quite efficient. As Mr. R. P. Gregg states in his *Economics of Khaddar* (p. 87), " for small and decentralized markets, hand-operated machines may be just as efficient, by both engineering and price criteria". He further observes: " The economic strength of small-scale decentralized intensive industry lies in its low fixed charges, low power costs, low expenses for repair, maintenance, obsolescence and depreciation, low inventory charges, rapid turn-over of material and product, little or no storage and transportation costs, and security of employment " (p. 88). The advantages of decentralized production have lately been widely realized in Western countries and have been extolled by successful captains of industry like Henry Ford (see his books *My Life and Work* and *To-day and To-morrow*). In the East also, China and Japan have successfully demonstrated the possibilities of decentralized production. Sir Purushottamdas Thakurdas has directed our attention to a remarkable system of decentralized industry in Japan connected with the name of Dr. Masatoshi Okochi, in which most processes of production are carried out in the workers' homes without any loss of efficiency. We are fortunate in having in India already a well-established system of decentralized industries and it would be a grave mistake to weaken it.

Fifthly, decentralized production has also important military and tactical advantages. It alone can defy modern warfare. The enemy can destroy concentrated power-driven industry by bombing, but not a decentralized industry like hand-weaving. It was the decentralized character of the Chinese industry that enabled China to supply herself with her requirements during her prolonged war with Japan. The same considerations ought to apply with equal force to India. The mill industry is localized in a few centres, and is

necessarily exposed to the dangers of aerial warfare; but hand-weaving is scattered all over the country and cannot be seriously injured. Not only could it defy attacks; the handloom could also ensure a steady supply of cloth. In a world subject to periodical outbreaks of intense and prolonged war, so far as possible the production of essential requirements like foodstuffs and clothing must be available locally, and dependence on distant markets might be fatal in times of serious stress. When decentralization of production is becoming a dire military necessity, it would be sheer madness to neglect the admirable system of decentralized production already existing in this country.

Sixthly, there is a special reason in the case of India for the preservation of small-scale industries. It is partly economic, partly social. The village has been the backbone of India's economic as well as cultural life. If industrialization involves the decay of village crafts and the concentration of workers in cities, it would greatly undermine the "serenity, poise, dignity, spaciousness, proportion, graciousness, deep-rooted sureness, and elemental simplicity and beauty" which have characterized our rural life in the past and have been the objects of admiration among our best minds and among those from other countries. The inherited skill which is now a great asset to our handicraftsmen will be lost and their lives will become mechanical and monotonous. It would not be wise to under-estimate the importance of such social and moral considerations, because they have a great and abiding influence on our economic life.

174. *Special claims of hand-weaving.*—We do not claim that the arguments given above, can legitimately be applied in bolstering up any primitive industry. We agree that efficiency of a certain degree has to be proved if even a small-scale cottage industry is to claim help from the State. It is the claim of the handloom weaver that he has readjusted his art after the coming of the mills, and that consequently he is able to produce cloth nearly at the same cost as they. We consider this claim to be largely substantiated. When the handloom weaver used hand-spun yarn which cost him a great deal and plied the primitive throw-shuttle, he found himself helpless against the mills and he was soon deprived of three-fourths of the market which had been his for ages. But subsequently he adjusted his loom for the use of mill-spun yarn, as explained in earlier Chapters, and today the proportion of hand-spun yarn used on the handloom is very small, except in the Punjab and, to a lesser extent, in the United Provinces, with the result that the cost of the raw material has fallen. Technical efficiency has been largely enhanced by the wide adoption, in most areas, of fly-shuttle sleys; in many places dobbies and jacquards are also in use. In the result, the hand-weaver's cost of production is only slightly higher than that of mills, as has been shown in Chapter VIII. The difference comes to about only 10 to 15 per cent in many staple lines of production and even this is claimed to be due to the enhanced cost of yarn to him resulting from the pyramiding process described in Chapter V. Further, if employment is normal and marketing orderly, a hand-weaver could earn at least 8 annas a day which is not too low for Indian conditions, and not too small considering his meagre capital equipment. Hand-weaving can also claim to be a suitable domestic industry for India, as the capital investment required is within the capability of the poorest person and, a normal Indian family is a suitable unit for working a handloom. The power-loom can also be a domestic industry, but the capital equipment required for

it is about Rs. 2,000 as against Rs. 100-0-0 for the handloom. The handloom can be repaired by any village artisan, but this is not the case with the powerloom. Hence the inevitable tendency for the single-unit powerloom to become a small powerloom factory. Hand-weaving as a cottage-industry has, therefore, a strong case and its claim for a little help in regard to yarn supply, credit and marketing facilities seems amply justified. So far as we know, hardly any of the other small-scale industries of India can make such a cogent claim for protection.

175. *Hand-weaving still a cottage industry.*—It may not be out of place in this connection to examine an argument lately put forward for questioning the right of hand-weaving to be considered as a cottage industry. According to some persons, hand-weaving has ceased to be a cottage industry by its using mill-spun yarn so largely. The following statement appears in the Report of the Industrial Survey Committee of the Central Provinces and Berar (1939): "The moment weavers have taken to weaving of mill yarn, they have ceased to be cottage or village industry workers for all practical purposes.....even farmers who take to cultivating raw material for mill industries have in effect become a part of the factory. It is much more so when the raw material itself, as in the case of weavers, comes from a mill. In such a case, the lot of the weaver is intimately connected with that of the mill; nay, he has become a part of the mill itself" (part I, p. 19). This line of reasoning is rather difficult to follow. The hand-weaver has to use mill-made yarn, because hand-spun yarn of the qualities required cannot be had in sufficient quantities and at economic prices. As has been shown in the last paragraph, the handloom industry was nearly ruined by its dependence on hand-spun yarn and it was the timely adoption of mill-spun yarn that enabled it to survive, and even to thrive in some lines. If he now stops taking mill yarn he will cease to have even the partial employment that he is able to obtain and the consequence will be unemployment and starvation for millions of weavers. Further, we do not think that it is the nature of the raw material used that determines whether an industry is a cottage industry or not. A hand-weaver working his loom in his own house with his own and his family's labour does not cease to be a cottage-worker, merely because the yarn used was spun in power-driven mills. The village blacksmith also uses factory-made iron and steel, but he does not cease to be a cottage worker on that account. We, therefore, consider the argument untenable. Hand-weaving (excluding perhaps that part of it which works in *karkhanas*) continues to be a cottage industry and is the largest of our cottage industries. On its welfare depends the prosperity of a numerous population of skilled workers in this country. As now equipped, it can hold its own against the mills if a fair chance is given. On no reasonable ground, therefore, can this industry be denied the little aid that it asks for.

176. *Nature of help required.*—If it is decided that the handloom industry should be preserved, the question next to be considered is what the nature of the help should be. But the nature of the help will depend upon the exact character of the handloom weaver's difficulties. The main difficulty of the handloom weaver is that his earnings have been falling and are continuing to fall. Why are his earnings low? On this question there is a considerable difference of opinion. It is believed by some people that the low income of the hand-weaver is due to the competition of mill-made cloth. The low

prices at which the mills are able to make their cloths determine the market prices of all cloth directly or indirectly and thereby the hand-weaver has also to sell his cloth at more or less the same prices in spite of his costing being higher. Thus for many years he has been incurring losses and has been getting impoverished. This diagnosis, however, is not accepted by some others. They say that the weaver's low income is due to his uneconomical ways of production and the high cost he has to incur on yarn, credit and marketing for which he depends on a chain of parasitical middlemen. We have given careful thought to this question and our finding is that the low income of the hand-weaver is due to both these causes. In some of the more developed hand-weaving centres where medium and high-count yarns are used the competition of mill cloth is perhaps a more potent cause of low earnings than in the more backward areas which use low-count yarns. But in all areas both causes are operating. Although mill competition has deprived the handloom of some of its markets, it is unfair to attribute this entirely to that factor alone, as we have shown in Chapter VIII. The loss of markets is due as much to the fundamental changes in the fashions and dress habits of people which have taken place all over India. It may be true that mills have benefited by these changes more than handlooms, but the changes did not occur owing to the competition from mills.

The proposals made to the Committee regarding the assistance to be rendered to the handloom industry will be considered in the next Chapter. We propose to discuss here only some of the objectives and principles to be held in view.

177. *Handlooms to be complementary to mills* ?—The first question to be decided is as to the scope of hand-weaving in future. It has been suggested by many that the handloom industry should confine itself to those lines of production in which there is no effective competition from the mills. If this advice is followed, the looms required will be few and they will be able to employ only a fraction of the workers now engaged in the industry. Those who advocate the above view hope that mills and handlooms could be made complementary to each other and that competition between them could thereby be eliminated. Already, as has been pointed out elsewhere, handloom production is complementary to mills over a certain limited sphere. This consists chiefly of multi-coloured goods of artistic nature, especially striped and checked cloths, saris and dhotis with solid borders, furnishing material, and a few other fabrics whose production cannot be economical for the mills. The Directors of Industries of Bombay, the Punjab and Sind consider that the handloom should stick to this field. The Director of Industries, Bombay says: "In this machine-power age the survival of any handicraft such as handloom weaving depends very largely on its producing such articles as are yet uneconomical for the machine to produce on a large scale." He also stresses "the desirability and even imperative need for the handloom industry to concentrate upon and specialize in the production of those kinds of fabrics in which the caprice of individual taste and the dictates of fashion demand almost an endless variety in design, pattern, texture and colour effect". Most of the Provincial and State Governments, however, consider that if the handlooms stick to the production of those specialities in the manufacture of which they have an absolute advantage, only a small fraction of the existing number of weavers will be able to find work and they

have stoutly opposed the proposal. The grounds urged by them are many. Artistic fabrics are generally expensive and the demand for them is confined largely to upper classes. Therefore, they have a very limited market and to restrict the handloom industry to such fabrics would severely curtail the scope of the industry and will have devastating effects on employment. The Director of Industries, Bihar, states that if the handlooms confine themselves to the production of goods which the mills cannot produce commercially there will practically be no hand-weaving left in that Province: Further, the raw material for artistic goods is expensive and, therefore, the weavers engaged in such fabrics will require large credits which would be difficult to obtain. No doubt the demand for speciality fabrics could be increased by vigorous propaganda, but that would require also ample funds and can only be undertaken by a large organisation under State aid. As has been shown already, the demand for many artistic fabrics like *kinkhabs*, brocades, solid-bordered saris, etc., has gone down tremendously in the last few years owing to change of fashions, and, therefore, adequate employment will not be provided for the large number of workers now engaged in the industry.

178. *Scope for speciality goods.*—There is, however, a great scope for the production of furnishing material like table cloths and runners, bed-spreads, curtain and *purdah* material, hangings and upholstery, and printed fabrics prepared by the hand-block process. Variety and distinctiveness are the main points in regard to these fabrics and the handloom is particularly fitted for producing them. The Director of Industries, the United Provinces, says that on account of the rise in the standard of living in recent years, there has been a growing demand for cheap but fancy furnishing fabrics, exclusive ladies' dress materials, tie cloth and similar articles. The United Provinces Handicrafts Emporium has demonstrated the possibilities of such production. In the opinion of the Director, "Every centre can have its own set of designs without diverting from the prevailing taste and get a good demand and a comparatively higher price than it can have by weaving fabrics of almost the same cost and requiring the same amount of labour". He also says that the supply of fancy yarns and artificial and semi-artificial fibres has also given a great impetus to handloom weaving. "The printing industry has been fully pressed into service to beautify even the ordinary fabrics. The chintz on *garha*, *sabudana* (broken twill), and many varieties of self-coloured checks produced by handloom weavers have increased the sale of handloom products considerably. This combination of hand-printing and hand-weaving has a vast prospect and should be fully developed." The Director of Industries, Bihar, expresses a similar view. The Bihar Cottage Industries has made special kinds of furnishing fabrics and has also succeeded in selling them in the overseas markets. The Bihar Director also says that leno net-cloth for mosquito curtains, drapery and summer shirts can be produced profitably on the handlooms and a market for these and for scarves, mufflers and kerchiefs of mulberry and "eri" silk may also be established in foreign countries.

179 *New markets.*—The crux of the problem is exploring markets, maintaining them and adjusting production according to their requirements. In various parts of the country there are now establishments, some of a semi-educational character, which are producing such fabrics in large quantities for internal and external markets. The work done at Calicut and Ikkadu in Madras and at Kalimpong in Bengal is noteworthy. We found also

exquisite lace and embroidery work going on especially in Catholic convents where nuns from Belgium and other continental countries have brought with them a wealth of technical skill for the training of girls in this country. Some of their students have set up independent establishments of their own. Professional weavers have generally fought shy of such lines of production; but there are exceptions. For instance, in Multan we found several *sowcar*-weavers engaging in producing furnishing fabrics and dress materials for the American market, which is being tapped through Punjabi merchants operating in America. We were told that enormous profits are made in the trade, owing to the great preference shown by American women for the 'exclusive' dress material from India. It is our duty to see that such profits are shared to a reasonable extent by the weavers producing them and that as many of them as possible benefit by such opportunities. An organisation preferably of a semi-public character is, therefore, necessary for exploring foreign markets and distributing steady orders to the various centres in India, where such work is going on. On every ground it would be advisable on the part of the Mill-owners' organisations to assist these ventures actively; thereby handlooms will become more and more complementary to mills and thus the present difficulties will be largely solved.

We understand that there is also room for certain kinds of staple cloth in the overseas markets. Sir Frederic Stones of Bombay told us of the possible openings in West and Central Africa for cloths like bleached striped drills, samples of which were shown us by him. In his opinion there is a great deal of scope for increasing production in such lines. It may be that the immediate demand has arisen owing to the present war, but there is every probability of the market continuing, provided the right kind of articles are turned out and properly marketed. Likewise, there may be demand in parts of Western Asia for coarse cloths like *garha* which may meet the same need there as it now meets in Northern India. As shown elsewhere, the exports to West Africa of Madras handkerchiefs have declined and this question demands our immediate attention. India needs a vigilant batch of trade agents who could do such work and the money spent on them will be amply repaid.

180. *Specific direction not possible.*—However much the demand for specialities and other goods may expand, it may not be possible to employ any large proportion of the weavers in such lines of production and therefore, in the short run at any rate, the handloom weavers will have to face mill competition in certain lines in which it is now formidable. Where this is due to an inherent advantage for the mills, it would be wisdom for hand-weavers to change over to other less competitive lines. But it is not possible to make any generalisation regarding this, because the equipment and capabilities of hand-weavers vary so widely in the different parts of India. What can be profitably produced in one place may not be possible elsewhere. As we have shown elsewhere, even in regard to shirtings and coatings, which are popularly associated with the mills, handlooms in Cannanore, Erode, Bihar Shariff, and elsewhere are able to sell such goods competitively with the mills, and to discourage them from continuing such lines of work would be unfair. The question of discouraging (or for that matter, of encouraging) this or that line of production can only be considered with special reference to localities, and cannot be considered on an all India basis.

181. *Planning for regional self-sufficiency?*—Excessive dependence on distant markets has lately been found undersirable, and it is perhaps necessary in future to plan production in such a way that the great majority of weavers in any centre do not depend on distant markets, even if large orders pour in as a result of the measures proposed in this Report. In the past, several centres in India had adjusted their production to the requirements of distant (even foreign) markets. Thus large numbers of weavers in Coimbatore and Salem had been producing certain fabrics (*e.g.*, turban cloth) which formerly had a steady demand in Central and Northern India and others elsewhere have long specialized in certain fabrics for which the sole market is West Africa. Similarly certain centres in Western India went on producing cloth depending on markets in other parts of the country. Such arrangements have lately been disturbed by a rather rapid change in fashions and tastes, and by the effective competition from substitutes; consequently much distress has been caused. This has made many thinking persons doubt if production for distant markets was after all such a desirable thing.

Why should a class of people depend on markets so far away and why should consumers in their own neighbourhood depend on distant markets? This question has been asked us by some experienced administrators and by many weavers themselves. This reminds us of Mr. J. M. Keynes's characterisation of international trade as people taking each other's washings. No doubt as in the case of international trade, there are certain natural or hereditary proclivities which give a quasi-monopolistic position to some centres in distinct lines of production, and this may justify specialization in certain luxury lines; but in the case of staple goods, most of which can be produced anywhere, such dependence on distant markets is not necessary and a readjustment in production arrangements may help both the producers and the consumers. A saving can be made in the cost of transportation and this will reduce the cost of marketing. Says Mr. Ford: '" To carry a product 500 miles to the consumer, if that product can be found within 250 miles, is a crime." When the market is nearby, the producer will also be able to keep in touch with the changes in the nature of demand among the consumers. It may, therefore, be advantageous to plan production in such a manner that the bulk of the weavers in any centre may produce for the neighbouring markets whose requirements can be easily assessed beforehand. For the few who are producing for distant markets also, the marketing organisation must make special provision. When the whole country is under a net-work of co-operative societies functioning side by side with other controlled organisations, such agencies can be utilised for putting into operation a plan like this. Such a reorganisation of production would be a source of stability especially in times of war and transport dislocation.

In the case of certain superior fabrics, specialization in distinct centres for far-off markets must continue and in the case of such goods the advantages resulting from localization cannot be neglected. But the position is different in the case of staple cloth. If it is essential that the staple foodstuffs must be produced nearby, even within the village, the same must be the case with clothing which comes next only to food as a primary want of man. The advantages of the division of labour are indeed great; but the extent of specialization possible and desirable must be decided with reference to political as well as economic realities. So long as the world is subject to periodical

depressions and frequent wars of a totalitarian type, it is essential that the prime requisites of life must be available locally, and therefore a certain amount of self-sufficiency within each district or economic region would be desirable. Decentralization of production has thus become necessary for national integrity and to neglect hand-weaving in such circumstances would be criminal folly. Viewed in this respect, it may also appear that there is justification for each family supplying a part of its own cloth requirements, as has long been going on in Assam.

182. *Remedies for unemployment.*—As has been shown before, unemployment has been growing for some years among the weavers, and there are certain "distressed areas" where the condition of the weaving population has become deplorable. Many looms all over the country are only working for part of the year, and in areas like Gujerat, Kathiawar and Central India, a large number of looms are said to be idle for nearly all the year. This involves the enforced idleness of a large number of skilled workers. Even as land in India has to support too many people, the handloom industry has to maintain a greater number of workers than it is able to, and the result is an undue "pressure" on this industry. Such a state of things is not in the national interest, and endeavours will have to be made to transplant some of the surplus hands to other occupations. Alternative lines of employment are indeed few in this country, but it may be possible to start certain allied industries like calico-printing in the distressed areas of hand-weaving. It may also be advisable not to allow too many people to enter this industry. In certain parts of the country, agricultural labourers who find no adequate employment on the land have taken up hand-weaving and it is believed that this has also depressed the wages of weavers. A certain amount of vocational direction has become necessary even in rural areas. But such problems can only be taken up as part of a general plan for economic amelioration.

It must be pointed out that a large number of the "distressed areas" are near centres where small powerloom units have lately increased. It is true that many of these powerlooms are worked in cottages, but they have a tendency to grow into small factories. We are unable to express any opinion regarding this new development, but we must state here that this has created considerable dismay in the minds of handloom weavers in many places. In a given unit of time, a powerloom can produce about four times the cloth made on the handloom, and as the orders do not quadruple themselves in the meantime, immediate unemployment among the hand-weavers is the result. No doubt various factors like the recent advance in cheap electric supply must be taken into account in this matter, but if the present pace of powerloom development is to continue, distress will become acute and provision will have to be made for employing the displaced weavers in alternative occupations.

183. *Internal re-organisation.*—The internal difficulties of the hand-weaving industry have already been described in various Chapters. They are connected with the high cost of yarn, credit and marketing, all of which are inter-twined in the usual *mahajani* system. It is due to the continuous operation of these factors that the weaver's net earnings have fallen and his standard of living has deteriorated. The weavers working under mahajans do not have to buy yarn or arrange for marketing their goods, but their earnings are even lower. The average weaver is unable to arrange for the supply of yarn and credit on economical terms; he can only do the weaving when he gets the yarn.

Therefore, an organisation for helping the weaver in this respect is needed. What shape this organisation should take, however, is a matter requiring some consideration. The view has been placed before us that the handloom industry should be thoroughly " rationalised " so as to place it on a competitive footing with the mills. If by " rationalisation " is meant the adoption of capital-using and labour-saving devices or any system of amalgamation of the handloom concerns into large capitalistic organisations, we must state that such rationalisation will be contrary to the interests of the handloom weavers and to the very basis of the industry which, to our mind, will prosper best as a cottage industry, with all its atmosphere of freedom and leisure. On the other hand, there is no doubt, a considerable scope for the introduction of a large number of improvements in production which can be adopted by these cottage units, and we shall be discussing many proposals in this regard in Chapter XI.

184. *The place of middlemen.*—An important question which has to be considered is regarding the agency to be employed in such a re-organisation. A large number of weavers are now financed by mahajans, and the co-operative movement has brought into its ambit only a very small proportion of them. As has been shown in Chapter IV, these middlemen have been a necessary concomitant of the industry. It is true that some of these middlemen have exploited the weavers' helplessness, but without their aid the impecunious hand-weaver would not have obtained his yarn nor found adequate markets. They have amassed a great wealth of knowledge about the business side of the industry and it would be very difficult to replace them. Further, a good number of them are of the same caste as the weavers, are in intimate social contact with them and are genuinely interested in their welfare. In these circumstances, it would be wiser to utilise them in some way than to challenge their existence by setting up the co-operative society or any other institution as a rival agency to them.

A uniform policy, however, may not be advisable in this matter. In those parts of the country where there are no middlemen operating in the industry the question does not arise and the co-operative society will be the only agency practicable. Where the middleman has already been functioning, it may be desirable to utilise him in some manner rather than antagonise him. In Bihar and elsewhere, the Government emporia distribute orders both among the co-operative societies and among the *sowcar*-weavers. Even in Bombay where the co-operative method is well established, it was found useful to work through contractors in certain centres. There is no doubt that any grant from the Government must be used primarily for helping the weavers and not the mahajans. But there is no reason why the public-spirited *sowcar*-weavers should be kept out of the movement altogether. It is for the Departments of Industries and Co-operation to utilize them in the interests of the industry. If the proposal about licensing yarn dealers (See Chapter XI) is given effect to, a good proportion of the mahajans may take out licenses and this may serve as a means of regulating their transactions. It may also be necessary to regulate their transactions by the application of the Money-lenders' Act, where such legislative provision exists, and make similar enactments in other places. Some Provincial Governments have excluded weavers' loans from their Debt Relief Acts. Therefore, supplementary legislation for the settlement of weavers' debts may b advisable in Provinces and States where the problem is acute. In some cases a drastic scaling down of old debts is justified. In those centres where weavers have to work under

condtions of sweating, it may be also desirable to set up Trade Boards on the lines of the Trade Boards' Act of Great Britain, with such modifications as are necessary to suit local conditions.

185. *Future of co-operation.*—Where the mahajan system is not fully established, co-operation is the only possible means of meeting the needs of the hand-weavers. Even in other places, if weavers feel that they could manage their affairs without middlemen, they also must be helped through the co-operative movement. For improving the economic condition of any class of small producers, whether industrial or agricultural, co-operation is the ideal method. There is a general view that weavers' co-operation in India has failed. It is true that such co-operation (as co-operation generally) has not succeeded very much in most Provinces, but this is due more to the application of unsuitable methods and is not due to the essential weakness of the co-operative principle. A re-organisation of the co-operative system will make it an effective agency, at least in areas where the weavers have realised the need for joint action in the common interest. As has been explained in the last Chapter, co-operation must be adapted to the indigenous institutions familiar to the weavers, and the activities of the various societies in regard to production and marketing must be carefully planned.

186. *Joint-stock organisations.*—Some persons have told us that co-operative organisations, in whatever way they may be reformed, will not solve the problem of the hand-weaving industry. They suggest that joint-stock organisations should be started on a regional basis, for carrying on the work now done by mahajans, and that the State should support them financially. Such organisations, in their opinion, should take upon themselves the responsibility of purchase of yarn, production through cottages or *karkhanas*, marketing, advertisement and even research. Such organisations should certainly be welcome, especially as their operations will come under public regulation, but no cogent case has been made out for any financial assistance from the State to such organisations.

187. *Karkhanas.*—As has been shown in Chapter IV, handloom production is now going on largely in *karkhanas* in some parts of the Bombay and Madras Provinces. These are giving employment to a good number of weavers, but their working conditions are not very satisfactory in many places. It is necessary, on every ground, to bring the larger ones at any rate under the Factories Act, as in Bombay. As there are several small ones which cannot be conveniently brought under the Act, a system of licensing may be introduced in regard to them. There are also other reasons why the development of *karkhanas* should be carefully watched. It is noteworthy that in many places the handloom *karkhana* has paved the way for the powerloom factory. We have already referred to the replacement of handlooms by powerlooms in one of the oldest *karkhanas* in India, at Cannanore. Similarly, Tikekarwadi Textile Mills Ltd., near Sholapur was first started with about 25 handlooms, but is now working with 65 powerlooms and only a few handlooms. In Bagerhat (Bengal), a handloom factory was started under the auspices of the Co-operative Union with two handlooms, later increased to 70. Latterly, 50 powerlooms have taken the place of the handlooms of which only 6 are left now. Similar changes have also taken place in Amritsar and elsewhere. We are unable to express an opinion regarding the advisability of powerlooms replacing handlooms. But we consider that any sudden change in that direction is bound to cause unemployment among handloom weavers.

No doubt if in *karkhanas* or under the aegis of co-operative societies, a large number of weavers can be brought under some organisation, it may be possible to bring into practical use some of the improved appliances which will reduce the cost of production of handloom cloth. In this connection, it has been suggested to us that the distribution of sized warps made with the help of the slasher-sizing machine would greatly reduce the cost of manufacture and increase the income of the weaver. The slasher-sizing machine has indeed been found profitable for mills, but there are serious difficulties in the way of its being useful to the hand-weaving industry. Apart from the loss of income which, in most places, this would involve to the other members of the weaver's family who now undertake preparatory processes, slasher-sizer would be economical only where a very large number of weavers are engaged in the weaving of a narrow range of counts. Thus where 20s counts are used, the machine would turn out on an average 625 lbs. of sized warps per day. It would be difficult except in very big centres to find an effective and orderly demand for so many warps of 20s counts in a day, and as in most centres handloom weavers generally use a wide range of counts (*e.g.*, from 16s to 80s), slasher-sizing machines cannot be economically used. Even if yarns of different counts are sized in the machine from day to day, some kind of planning in the production will be required. Hence the difficulty in regard to co-operative societies, or even *karkhanas* of the usual size, installing sizing machines. In Bengal an experiment on this line was made at Bagerhat where a slasher-sizing machine was installed at the handloom *karkhanas* of the Co-operative Union with the funds supplied from the Government of India grant for hand-weaving. It was soon found that the machine could not be economically used and eventually the handlooms were replaced by powerlooms. It is believed that the sizing machine gave the impetus to this replacement. Thus the machine which was supplied for mending the handloom industry has nearly ended it, so far as Bagerhat is concerned. At any rate a valuable lesson has been learnt by this.

188. *The cottage system.*—In our opinion, no adequate reasons have so far been found for disturbing the domestic system of production so well established in the country. The weaver working in his family circle is the ideal arrangement, socially as well as economically, and by bringing the cottage weaver under a co-operative or controlled *mahajani* system it would be possible to render him all the help in regard to yarn, credit and marketing that he stands in need of. Improved appliances can be demonstrated to him at the co-operative office or at the fairs which he frequently attends. It may also be possible to send round motor vans for demonstrating new designs as well as technical appliances. The possibilities of such decentralized production have been demonstrated in the industrially advanced countries of the West. Such production could stand better than large productive units the strains and stresses of a trade depression. No doubt some link with larger organisations will be useful. The most useful link will be with a marketing agency functioning on all-India basis, with branches all over the country as will be shown in Chapter XI. The weavers' lack of punctuality and carelessness in regard to dimensions, and ends and picks, can only be cured by the discipline which a co-operative system can give. General education too can do some good and it is necessary that schools should be opened in areas where handloom weavers congregate.

CHAPTER XI.

The Fifth Term of Reference.

I. Delimitation of Fields.

189. *The Fifth Term of Reference.*—According to the fifth term of reference, we are required "in particular, to investigate how far an enactment prohibiting the mills from using yarns of low counts would help the handloom industry in maintaining its production." We interpret the words "in particular" to mean that the Committee is required to discuss fully the specific consequences of such an enactment on the handloom industry as well as its rivals, and also in a *general* way to consider the pros and cons of the other important suggestions that would arise in the course of our discussions with the several parties. Actually scores of such suggestions have been placed before us, and we feel that even as a Fact-Finding Committee, we should, without committing ourselves to any recommendations, place all the relevant material in this connection at the disposal of the Government for such action as they think fit.

As the fifth term of reference stands, the expression "yarns of low counts" has not been defined but left for us to determine. Of course, the extent of the consequences of the kind of restriction envisaged by the fifth term of reference will depend directly upon the exact level at which the line of demarcation is drawn. In this connection, some guidance is available to us in the deliberations of the special conference of Provincial officials and representatives of textile interests which was held at New Delhi under the chairmanship of the Hon'ble the Commerce Member on the 6th and 7th December 1940. At that Conference, among other things, it was agreed that the Fact-Finding Committee might investigate the quantity of cloth produced by handlooms of the higher counts and of the lower counts and that a final decision might be taken on the results of that investigation. The suggestion was also made that the mills might be prohibited from using in the production of cloth both for weft and warp counts below 11s both ways, doubled yarn being counted as single count for this purpose. Again, it was suggested that the Fact-Finding Committee would investigate the production of handloom cloth using counts below 11s. We, therefore, take the range of 1s—10s as "low counts" for the purpose of this discussion. At a later stage, we shall discuss the consequences of possible demarcation at higher levels of counts. Whatever be the line of demarcation drawn, however, there are certain general and basic conditions which must be fulfilled before legislation, if any, in this direction is undertaken. In the next paragraph we state these conditions.

190. *General conditions required for restriction of low counts.*—If such a restriction, as explained above, is to be put into operation, various provisions will have to be made for rendering it effective. Firstly, a similar restriction will have to be placed on the mills in the States also. Otherwise, such a restriction will set in motion undesirable transfers of capital and enterprise, interfering with the proper localisation of industries. Secondly, imports of cloths in this restricted range of counts will have to be prohibited. Thirdly, a similar restriction will have to be placed on small powerloom units, lest

they should take the place of the big mills in competing with handlooms in the range selected for restriction. Fourthly, certain exceptions will have to be made in respect of cloths of those counts which are now produced in the mills and are not capable of being produced by the handlooms (*e.g.*, drills, twills and jeans).

191. *The percentage distribution by counts of yarn consumed by mills and handlooms.*—In Table LIV in Chapter V we have given the percentage distribution by counts of the consumption of yarn by handlooms and mills respectively. We repeat that table here for ready reference:

TABLE LXXIV.—*Percentage distribution by counts of the consumption of cotton yarn by handlooms and mills.*

Counts.	Mills.	Handlooms.
1—10	8·1	20·0
11—20	49·6	34·4
21—30	25·7	19·6
31—40	11·6	14·2
Above 40	5·0	11·8
	100·0	100·0

From the above table it will appear that for the range of 1s—10s counts the respective percentages of mills and handlooms are 8·1 and 20·0 per cent. This means that in very coarse lines, the handlooms have a much larger share of their production than mills have of their own. In this range of counts, of course, the handlooms produce *durries*, *garhas* and khaddar, motias, *dusutis*, and such other coarse goods. It is interesting to note, however, that the total mill consumption in this range amounts to the equivalent of 72·12 million lbs. while handloom consumption of yarn in the range amounts to only 46·80 million lbs., in terms of absolute figures. We have not been able to obtain figures for the respective consumption of yarn of mills and handlooms in further detail, *i.e.*, according to each count. Even as they stand, the above figures have been arrived at after a good deal of statistical collation.

192. *Varying regional effects of demarcation.*—Assuming that all these provisions are made, the question then will be how far the proposed measure would benefit the hand-weaving industry. In this connection, it is important to note that there is a wide variation in the percentage of yarns in this range of counts consumed in the various Provinces and States. A reference to Table LI in Chapter V will show that such a restriction would benefit only a few Provinces which use coarser yarns largely, in particular the Punjab (whose consumption of such yarn is nearly 64 per cent), Bihar and the United Provinces, and States like Baroda and Hyderabad, while most of the other Provinces and States will receive very little benefit, as their consumption of

that range of counts is very limited. The following table, in which we reproduce some of the figures from Table LI, will make this clear.

TABLE LXXV.—*Percentage of yarn under 10s counts to total yarn consumed by handlooms.*

Province or State.	Percentage.	Province or State.	Percentage.
The Punjab	63·93	Bengal	1·50
Bihar	35·88	Assam	6·25
U. P.	28·89	Bombay	6·00
Baroda	80·46	Madras	7·44
Hyderabad	17·80	Mysore	2·00
		Travancore . . .	5·00

193. *Some difficulties.*—It is doubtful if even those Provinces where low-count yarns are largely used will be able to reap much benefit from this restriction, because there are various other circumstances to be taken into account. In Chapter VIII we have shown that the existing competition is partly due to the fact that the types of goods woven by the handloom weavers are being replaced by similar goods, but of slightly higher counts. It is a known fact that within a particular range of counts, area for area, finer cloths are cheaper than coarser cloths, although weight for weight, cloth of higher counts must be more costly. That is to say, when compared on the unit of dimensions and not on the unit of weight finer cloths are cheaper than coarser cloths up to a point. As an illustration, if we take, say, a grey dhoti of 20s×30s, it would cost approximately 22 annas per lb. and 1 lb. would contain 6·8 sq. yards of cloth. On the other hand, 1 lb. of grey dhoti of 14s counts would cost 16·5 annas per lb. and 1 lb. would contain 3·9 sq. yards of cloth only. The consumer who buys the cloth on the unit of dimensions thus gets 4·95 sq. yards of 20s×30s cloth for Re. 1 while in the case of cloth of 14s, he gets 3·8 sq. yards only for Re. 1. Any restriction, therefore, must be so devised as to protect the handloom weaver against his goods being replaced by similar goods of finer counts. This would mean that the line of demarcation would have to be placed at a much higher level, say 20s, if the restriction is to be effective up to 10s. It has been shown in Chapter VIII that hand-woven plain grey shirtings of 10½s counts are being replaced by mill-made grey shirtings of 20s counts. This and other examples show that the present tendency of the consumer whether in the village or in the town, and even among the labouring classes, is definitely towards finer counts. Therefore, in order to enable the handloom weaver to reap the benefits of the restriction up to 10s, the mills would have to be prevented from manufacturing all goods of counts below 20s. This is likely to force the mills to take up higher counts to a greater extent than now. The consequences of such a shift on the mills as well as consumers are discussed in the next two paragraphs. Here it may be stated that while the imposition of a restriction up to 20s, in order to stop mill

competition with handloom cloth below 10s is bound to inflict great damage upon the mill industry, the benefit accruing to the handlooms will be small in comparison.

194. *Effects on mills.*—We shall now see how such a restriction will effec the mills. The following table gives statistics of the annual production of yarn and cloth under various counts produced in mills in the Provinces and States.

TABLE LXXVI.—*Average annual production of cotton yarn spun in the Indian mills during the period from April 1934 to March 1939.*

(*In million lbs.*)

	1—10s.	11—20s.	21—30s.	31—40s	Above 40s.	Total quantity spun.	Total weight of cotton cloth manufactured by the mills.
Bombay City	53·70 (9·54%)	206·13 (36·51%)	167·69 (29·74%)	82·31 (14·60%)	54·16 (9·61%)	564·08 (100·00)	495·90
Bombay Island	40·19 (13·04%)	106·89 (34·68%)	94·64 (30·72%)	43·00 (13·96%)	23·41 (7·60%)	308·13 (100·00)	263·05
Ahmedabad	2·05 (1·26%)	67·06 (37·70%)	46·72 (26·25%)	33·76 (18·96%)	28·16 (15·83%)	177·75 (100·00)	178·13
Madras Province	2·70 (2·12%)	54·57 (42·73%)	37·68 (29·45%)	27·56 (21·53%)	5·33 (4·17%)	127·84 (100·00)	24·03
Bengal	3·37 (8·91%)	17·48 (46·23%)	9·72 (25·71%)	5·23 (13·83%)	2·00 (5·22%)	37·80 (100·00)	36·12
U. P.	19·50 (18·10%)	55·87 (51·80%)	29·55 (27·40%)	2·71 (2·50%)	0·25 (0·20%)	107·88 (100·00)	50·18
Ajmer-Merwara	4·21 (38·30%)	6·27 (57·00%)	0·52 (4·70%)	.. ..	.. ..	11·00 (100·00)	8·58
Punjab	2·07 (23·26%)	6·31 (70·90%)	0·52 (15·84%)	.. ..	.. ..	8·90 (100·00)	7·80
Delhi	3·38 (12·70%)	19·16 (72·10%)	3·18 (12·10%)	0·55 (2·10%)	0·29 (1·10%)	26·56 (100·00)	20·43
C. P. & Berar	11·76 (23·76%)	27·27 (55·00%)	7·35 (14·80%)	2·48 (5·00%)	0·78 (1·50%)	49·64 (100·00)	20·27
Bihar & Orissa(a)	0·36 (20·00%)	1·24 (69·00%)	0·18 (9·90%)	0·02 (1·10%)	.. ..	1·80 (100·00)	0·63
Indian States	15·54 (9·20%)	99·06 (58·40%)	40·31 (23·70%)	9·36 (5·50%)	5·39 (3·20%)	169·66 (100·00)	140·62

(a) Average of two years, 1937-38 and 1938-39.

As has been shown above, in order that a restriction on counts up to 10s may be of any effect, a higher line of demarcation up to counts 20s will be necessary. If the restriction, therefore, is to be imposed on counts up to 20s, the consequences on many mill centres will be serious. We have no data as to what proportion of the various counts spun in the different mill centres is woven in the same centres. But assuming that the proportion of the counts of yarn spun in the mills follows roughly the proportion of the various counts spun, and taking into consideration both percentages as well as quantities of cloth produced, it is clear from the table above that many mills especially in the United Provinces, the Central Provinces and Berar, the Punjab, and Bombay City and Island will be badly hit.

195. *Effects on the cotton grower.*—It has been urged upon us by the East India Cotton Association, in their reply to our questionnaire, that "any artificial handicap to textile mills to check competition with handlooms would seriously affect the consumption of short-staple cotton in Indian mills and to that extent would completely upset the agriculturist who has no option but to grow short-staple cotton in view of various climatic and geographical reasons." The force of this objection, in our view, exactly depends upon the level at which the line of demarcation is drawn as also upon the time taken by the handloom industry to step into the gap created by the withdrawl of the mill industry from the restricted range of counts. If the line of demarcation is drawn too high, it is bound, in the short run at any rate, to "upset the agriculturist". We are not, however, in a position to assess the exact damage and the period for which it is likely to be inflicted upon the cotton-grower. If the line is drawn at 10s, however, the damage is bound to be very small, in view of the facts, firstly, that there is also a degree of resiliency in cotton-growing, which can turn from the very short to the short staple varieties, and secondly, that in counts below 10s the amount of mill production displaced is so small that handlooms can be relied upon to step into the gap with greater facility.

196. *Effects on the consumer.*—It has also been pointed out to us that the handloom industry might not be able to turn out cloth in the restricted range in sufficient quantities without creating any scarcity in that section of the cloth trade, and that it will thus impose a burden on the consumers. The importance of this objection also, in our opinion, will depend exactly on how large is the quantity of cloth involved, or, in other words, how big is the range of restricted counts. If the line of demarcation is drawn high enough, there is no doubt that at least in the short run the handloom industry will be unable to cope with the demand of cloth in that range of counts. This might also react upon the market by raising the prices of such cloths and actually render the mill cloth in the remaining ranges of counts cheaper. In this connection, it must be remembered that to a large extent there is a close relation between particular range of counts and the types of cloths produced. Thus there will be a short-run scarcity, but at the same time there is no doubt that there is everywhere scope for the expansion of the handloom production, because the labour force available is well nigh inexhaustible, while the initial capital required for a handloom establishment is very small. But the question is whether yarn in adequate quantities will be available and whether the industry will be able to adjust itself to the new requirements within a reasonable time. If by any reason, yarn prices go up, cloth prices may also go up and thus the consumer may be affected.

How the mills will react to the new situation is not quite clear. It is possible that there will be a reduction in the spindleage engaged in the particular range of counts. Although the demand for yarn in this range of counts may remain as the handlcoms need it, the mills are more likely to shift to the production of the immediately higher counts rather than keep their looms idle. Even if they continue to spin the restricted counts, there are reasons why production costs may go up. It must be remembered that the combined spinning and weaving mills are placing on the markets only that quantity of yarn which is in excess of their daily requirements and to that extent the prices are kept down. But if they were to spin only for the handloom weavers, the cost of manufacture of yarn would naturally rise and hence the price also.

Thus, all this might lead to a rise in the cost of the raw material to the handloom weaver and a consequent rise in the price of his finished product. This, in turn, will affect the consumers of cloth in the range, and other repercussions may follow.

In the circumstances stated above, we are of the opinion that the proposed restriction of counts below 10s is not likely to lead to any real benefit for the handloom industry although a temporary advantage may be obtained by a section thereof.

197. *Demarcation at higher counts than 10s.*—It may be said, however, that if the line of demarcation is drawn higher, as has been proposed by many, the handloom industry would derive greater benefits. We shall now take up this aspect of the matter. The first thing that strikes us, as it struck the Tariff Board in 1932, is that there has been hardly any agreement amongst the weavers in different areas regarding the range of counts to be selected. This is quite natural in view of the wide variation in counts of yarn woven in the different Provinces and States (see Table LI). While some weavers are satisfied if the restriction is placed on counts up to 20s or 30s, others (*e.g.*, at santipur in Bengal) stated that even restriction at any level less than 80s would be of no avail ! In several other centres, again, we were told that restriction on any range of counts whatsoever would be futile, as competition was not according to counts, and there will remain scores of loopholes for people to dodge such restrictions. In view of what has been said in regard to restriction on the low counts, it is, *a fortiori*, quite unnecessary to discuss the feasibility of setting up a limit higher than 20s. If we adopt such drastic proposals, there can be not doubt that the entire mill industry will have to be forthwith closed down. Nay, even if we select 20s as the limit, more than half the mill production will have to go. For the mills it is not a mere case of switching over to higher counts ; for, the heavy machinery of the mills cannot be adjusted to the requirements of new lines of production, and hence such a step would amount to nothing less than scrapping of the machinery. Most of the staple production of the two industries is in the range of 11-30 counts, and consists mostly of dhotis, saris, shirtings, coatings, etc., either grey or coloured. It is in this field that the competition is really keen, and hence for bringing any real relief to the handloom industry the restriction will have to be placed as high as 30s counts ; and in fact a majority of the Provincial and State Governments and others replying to our questionnaire have selected this range for the restriction. But, for reasons already stated above, fixing the limit as high as 30s will be disastrous from the viewpoint of the mill industry, while the gains from the viewpoint of the handloom industry are not likely to be commensurate. We, therefore, pass on to other variants of the restriction method.

198. *Variants of the method of restriction of counts.*—One interesting variant of the method of restriction of counts is to set up an upper as well as a lower limit for mill production of cloth. Thus, it has been proposed by some that the counts below 40s as well as above 80s should be allocated to the handloom industry and that the mill industry should be left with the intermediate range of counts. Another proposal made to us was that mills should be prohibited from using counts between 10s and 40s, for the reason that the main demand in villages is for the range of counts 10-40s. Another method is to

combine a restriction regarding the types of cloth with that on counts of yarn. Thus, the Madras Provincial Handloom Weavers' Co-operative Society suggested that the mills might be prohibited from manufacturing dhotis and saris of counts 60s and below, so far as the production relates to sale within India, subject to the proviso that there should be a corresponding restriction on imported cloth of that kind. Similarly, the Government of Bengal, in their reply to a circular letter from the Commerce Department in this regard, desired that mills might be prohibited from producing saris, dhotis, lungis and bordered chaddars, etc., with yarns of counts below 25s ; and the Surat Chamber of Commerce and the Surat Weaving Association have suggested that the restriction should apply to all counts below 30s, with the exception that the mills should be permitted to weave plain grey varieties. Almost all the arguments applying to the restriction of counts below certain levels apply to those variants also, with the modification that in the method of combining types of cloth with counts of yarn, the rigour of restriction is likely to be much less. We think that the weight of arguments is against restriction on weaving counts in particular ranges, and some of the arguments go equally well against the combination method. Moreover, as pointed out below, there are great difficulties in clearly defining the textile terms in such a way as to prevent evasion of the law and fraud, and not all of the above proposals can stand legal scrutiny.

199. *Abolition of weaving in mills.*—Numerous other suggestions were placed before us by Provincial and State Governments, as well as by weavers' associations and private individuals, in their written and oral evidence to which we now turn our attention. Not all the suggestions are wholly new and some of them have already been discussed in Industries Conferences and elsewhere. But, for the sake of convenience, we propose to bring them together so as to facilitate a connected and consistent discussion. Such, for instance, is the proposal made, in various forms, by the Director of Development, Orissa, and by several others, that the mills should do only spinning and abandon weaving altogether. Here not only the fate of a major national industry, but also the interests of millions of consumers of cloth and producers of raw cotton are involved. Even if we abolish the weaving section of the mills, the handloom industry will have to hold its own against imports of foreign cloth in a competitive market. If it is suggested that the imports also should be shut off by means of prohibitive duties, then the burden on the consumer of cloth as a permanent proposition still remains. The parallel theory of protection applicable to modern industries does not hold good here, for the simple reason that while in their case the guarantee of ultimate reduction of costs and prices and withdrawal of protection is available, there is hardly any hope of such assurance coming from the handloom industry as against cheap machine-made goods, whether indigenous or imported, in the near or distant future. Thus, to burden the consumers of cloth, who in India are as poor on the whole as the weavers themselves, and far more numerous too, will amount to a strange form of charity. If charity alone be the object, there are other and better ways of achieving the same result. A case has been brought on our notice, that of the Meenakshi Mills of Madura, who, it is stated, keep handlooms within the mill precincts and sell the hand-woven cloth at much better prices than mill-woven cloth. It is also stated that a mill, concentrating on spinning only, will also be able to save interest on capital investment and

depreciation, current charges for operation of the looms, and the capital costs of buildings, plant, etc. This argument holds little water; for, if better prices than for mill cloth are available for hand-woven products, it may be either because of better quality or because of higher costs. In either case, the generality of consumers will not be benefited by such changes, for they are interested in cheap cloth mainly; and, moreover, overhead charges cannot be the bug-bear of any industrialist so long as there is an adequate margin of profit available. We wish to state here, however, that the Meenakshi Mills' experiment has an important lesson in another direction for us. In a later paragraph, we shall revert to this while discussing the feasibility of the mills employing handloom weavers either in mill sheds or in the weavers' cottages in the production of hand-woven fabrics with mill yarn.

Further, it has been suggested to us that the programme of abolishing mechanical weaving can be spread over a period of 20 years, during which the weaving plant can be allowed to depreciate, and steadily replaced by spinning plant. This suggestion has been based upon a misconception regarding the possibility of replacing powerlooms by spindles. The total quantity of yarn produced in the country is almost equal to our present requirements, in view of the fact that our exports of yarn are nearly equal to our imports. Thus, the total quantity of yarn produced in the country at present may be taken as the actual requirements of the textile industry as a whole, including mills and handlooms, and the miscellaneous groups, like powerlooms, hosiery, etc. This means that at the present level of the standard of life of the people, the clothing requirements will not necessitate a greater production of yarn than that indicated by the existing spindleage. How, then, can we replace the looms in the mills by more spindles? All that will happen and will be necessary to achieve the above object is to scrap the weaving plant only and this does not seem practicable.

200. *Discouragement of additions to looms in mills.*—A proposal not so objectionable as the above is that the existing mills must be discouraged from adding to their looms and that mills which are only engaged in spinning must be prevented from taking up weaving. It has also been suggested that such objects could be carried out by the imposition of a duty on the yarn used for weaving in the mills, but such a duty may be made ineffective as has been shown in para. 214 below. The emergence of a great spinning industry in the South has been of great assistance to the handloom weavers, and any direct or indirect measures which will encourage them to continue that work and discourage their taking up weaving will be helpful. One suggestion put forward is that the installation of new looms must receive the approval of Government. This may be possible if this forms part of a planned policy of textile production, but may not be advisable in the absence of a concerted endeavour. Further, any such check on mills will not be effective unless the small powerloom factories also are brought under a similar check. Another suggestion is that direct assistance may be given to purely spinning mills in the shape of subsidies based on the quantity of yarn produced by them or sold by them to approved co-operative or other organisations of weavers. In any case, the steps taken for discouraging weaving must not lead to a rise in the cost of material to the hand-weaver.

201. *Mills to provide yarn to weavers and take back cloth for sale.*—A rather interesting proposal placed before us, and supported by some millowners, is

that without necessarily giving up weaving themselves, the mills may be asked to distribute yarn among the weavers and take back cloth from them and sell it after finishing it. The Director of Industries in the United Provinces, for instance, suggests that the mills should evolve a system by which they could keep the handloom weavers engaged in the production of certain varieties of fabrics. He states that some of the woollen mills in his Province have successfully tried the installation of handlooms for weaving only, while the finishing is done by machinery. We may also mention here the instance of the Meenakshi Mills, Madura, which, as already stated, have opened a shed in the mill precincts for hand-weaving. It may also be possible to send work to the weaver's cottages and get piece-work done under supervision, and thus avoid some of the evils attendant upon working in the mill atmosphere. If any mills, particularly spinning mills, employ handloom weavers on such a basis, there is no doubt that total employment in hand-weaving would increase, and some of the organisational evils which predominate in the trade at present can be put an end to. Moreover, if such an alignment can be brought about between mills and handlooms, many of the disadvantages from which the handloom industry suffers, in respect of the supply of yarn, finance, organisation, marketing, etc., will ultimately disappear. We are of the opinion that if the handloom weaver is placed on a footing of equality with the mill weaver in respect of such basic conditions, the cost of production of his cloth would be almost the same as that of cloth woven on the machine, taking into consideration all the charges in costings for the two processes. We do not think that this is a transformation which can be brought about by legislation. In view of the fact that the fortunes of the spinning industry in India are bound up with those of the hand-weaving industry, we feel that this is a question calling for co-operation on the part of leaders of the spinning industry. Moreover, the mills will be thereby mitigating some of the acrimonious elements in the conflict between their own and the weavers' interests, and this will be a very wise move on their part to create an amicable atmosphere by thus actively aiding the handloom weavers. We are sure that the results of such co-operation will be beneficial to both parties. If the Provincial and State Governments, in their respective areas, bring about such alignment between the spinning mills and weavers, such action will be welcome.

202. *Restrictions on particular types of cloth.*—The Government of Madras recommend that the production of common wearing apparel of the masses should be left to the handloom weavers and that the mills should produce only such cloths as cannot be woven by the handloom weavers. The Madura Handloom Weavers' Co-operative Society states that the mills should not produce saris and dhotis of a width more than 36". Mr. A. P. Choudhury, of the All-India Spinners' Association, suggests that certain varieties of cloth such as saris with woven design borders, check and striped saris, etc., should be reserved for the handlooms. The same suggestion has come to us from several other witnesses. There are also suggestions that the mills should not produce coloured saris, *zenana* goods, *khans*, etc.

The term "sari" is a vague and wide one and it is impossible to give a specific description of it. In some Provinces, a sari is a piece of cloth which has a grey ground with borders exceeding 11/16th of an inch. In Bengal, for instance, a grey or bleached cloth of 44" width, 5 yards in length with a

coloured border one inch in width would be called a sari. The same type of goods with a smaller border would be called a dhoti. For instance a *gundanchu* dhoti of Salem would be of a grey or bleached ground with a border of about 1½". An *uparni* of Central Provinces would also be covered by the same definition, as it has the same dimension but a width of 1½" or 2" for a border. It would appear, therefore, that in Provinces where a sari is distinguished in borders only such saris would be confused with other garments in other Provinces. The Provinces such as Bombay, Madras and the Central Provinces, where the term "sari" means a definite coloured garment, would not recognise as saris the types of goods known in Bengal as such. It appears, therefore, difficult to correctly interpret the terms "sari", "dhoti", etc.

However, taking a very general definition of "sari" as something coloured, let us examine the consequences of a restriction on such an article. According to the different suggestions, if the mills are asked not to make saris, the mills should be correct in interpreting the term "sari" as standing for an article of women's dress where coloured yarns are introduced in the body and where borders and headings must be developed. The mills might very easily avoid producing this type. But nothing would prevent them from producing grey saris and dyeing them in piece, or grey saris on which the ground could be printed. It might encourage the introduction of plain grey or bleached goods by the mills where the borders and headings are printed subsequently. Owing to the flaw in the legal definition, the mills would still be able to replace hand-woven goods by another type. In the long run, such a restriction is not likely to be of any help to the weavers.

We, however, feel that some sort of reservation should be made for the handloom weavers. Such reservation, however, must be based on a mutual agreement between the mills and the handlooms. In our opinion, such agreement would be possible if the mills agree not to weave any goods of plain weave with a width of from 25" to 50" and a length of from 1½ yards to 9½ yards, per piece, divided by headings across the width at a length-wise distance of less than 9½ yards and with borders, the grounds of such articles not being distinguished with any stripes or checks woven, developed by different counts of yarn or by bleached, coloured or printed yarn. Neither should the grounds of such cloths be striped or checked by some other process, such as printing or by crimp-dyeing or by any other chemical methods. Such a definition would reserve to handlooms all striped and checked saris, *gamchas*, and checked chaddars, and is likely to narrow down the field of competition. The mills and powerlooms in our opinion can afford to relinquish their production of this type of articles. This is likely to provide a greater field for the handloom weavers and no complication whatever is likely to arise if any such voluntary restriction is imposed by mills upon themselves in the interests of the poor handloom weavers.

203. *Mills not to use dobbies and jacquards.*—A suggestion has been made that the mills should be prohibited from using dobbies and jacquards, as these, it is stated, have enabled the mills to encroach upon the field of "speciality" fabrics produced by the handlooms. We have carefully considered the consequences of such a step and have come to the conclusion that it will cause an unnecessary amount of damage to the mill industry by prohibiting the production of a number of piecegoods, in which dobbies and jacquards

play a part. We also feel that it is not desirable that any technical impediments should be placed in the way of the development of a growing national industry. Besides, in so far as the aim is the reservation of the field of saris to handlooms, that aim can be achieved equally well by the adoption of the method discussed above.

II. Other Proposals.

204. *The control of yarn supply.*—There are suggestions that yarn should be controlled. As pointed out in Chapter V, the price of yarn is "pyramided" by a chain of middlemen working between the producers of yarn, *i.e.*, the spinning mills, and the consumers, *i. e.*, the hand-weavers. We feel, however, that plentiful yarn should be supplied at a reasonable cost to the weavers. In this connection, numerous persons have suggested the appointment of a yarn controller. We do not think that there is any room for a yarn controller in normal times. But we feel that the yarn dealers should be brought under control and licences may be issued to those only who would abide by rules for the sale of yarn. We have seen that in most cases the yarn dealers are the buyers of finished goods. We feel that this must be discouraged. A yarn dealer to be entitled for a licence shall not have any interest either direct or indirect in the finished products. The licensing can be enforced under the direction of the Provincial and State Governments and the Directors of Industries should be empowered to cancel a licence in the event of any breach of rules on the part of the yarn dealers. The rules concerned should be in respect of malpractices mostly, but some sort of connection between the invoice price of yarn purchased by the dealers and the price at which it is sold may be maintained after allowing for normal profits. An incidental advantage of licensing yarn dealers would be that it would be possible to collect statistics of the supply of yarn to handloom weavers and others through the licensed yarn dealers. They should be required by law to submit periodical returns showing the sales of yarn under classified headings, such as handlooms, powerlooms, hosiery, etc.

In Chapter V, we have dealt with the question of malpractices and in connection therewith we have brought together certain suggestions regarding changes in the Indian Merchandise Marks Act in paragraphs 80-83. The principal suggestion in this connection is that the correct number of knots in each bundle according to the standard packing should be insisted upon and the yarn is required to be packed in standard bundles by law. Moreover a strict supervision at the sources as well as the subsequent stages of sale might be adopted so as to enforce the provisions of the Act.

205. *Yarn depots.*—Another suggestion made by several witnesses was the establishment of yarn depots. The Directors of Industries of Assam, Sind, the Punjab, Mysore and Baroda and several other bodies such as the Marwari Chamber of Commerce, Calcutta, the Silk and Artificial Silk Association of Bombay, the Koshti Mandal of Nagpur and several weavers' cooperative societies have suggested that yarn should be supplied to the weavers directly by the Government. It is also suggested that the yarn depots should be combined with dyeing houses so that the profits earned in the dyeing houses would pay for the expenses of both the establishments. These proposals

have advantages as well as disadvantages. If the example of Mysore is any guide, Government-managed yarn depots, are likely to be quite successful; but in such depots, the sale of yarn has to be on a cash basis, otherwise if credit is given, the position of such a depot is likely to be very involved from the financial standpoint. The Government depot cannot function like a moneylending *mahajan* keeping a close watch on the weaver, binding him down for good with criss-cross transactions. If then, the depot sells yarn on a cash basis, unless the weaver's cloth is at the same time purchased by such a depot, it is unlikely that the weaver will be completely owing allegiance to it. So long as the depot does not undertake a part of the marketing function either directly or indirectly, it will be difficult to wean the weaver away from the middleman yarn dealer.

It is not suggested that for the marketing of cloth, the agency of the middlemen, as it obtains to-day, can be wholly abolished. In this regard the experience of Mysore is likely to be useful. In Mysore, the yarn depot manager or *maistry* purchases cloth at a fixed price for standard types of cloth and later the cloth is disposed of through the existing machinery of middlemen. When there is the stamp of the depot on the cloth, the merchants also buy it without demur, and the stamp in effect becomes the guarantee of the quality of the goods. If the Provincial and State Governments adopt this system, and enforce some sort of standardization of cloths and prices, the yarn depot system is likely to be very successful. In this connection we make a reference to the marketing scheme outlined in a later paragraph. We may note here that recently as part of their famine relief programme the Government of Madras have opened five yarn depots in Salem town and its vicinity at which yarn is to be issued to weavers who will be paid for the cloth produced at rates providing wages approximately equal to relief payments on famine relief works.

The possibility of establishment of depots by the spinning mills themselves might also be considered. If spinning mills can be persuaded to open their depots in as many centres as they possibly can, it will no doubt be very helpful to their chief customers, the weavers. In fact, the Madura Mills have their agents and depots at principal centres throughout India, and the agents are compelled to sell at the contract rate and submit sale notes to the Mills; in certain cases, depots are permitted to sell ready if they have a surplus stock on hand, in which case the rate is the ruling mill rate on the date of sale. This is a system worthy of imitation by some of the other leading mills. It may be stated here that the Southern India Millowners' Association favour the idea of the mills directly supplying yarn to handloom weavers.

206. *Establishment of spinning mills at important handloom centres.*—Another proposal made particularly by witnesses from Bengal is the starting of spinning mills for supplying yarn to handloom centres which have no spinning mill in their vicinity catering for their demand. The Bengal and Assam weavers and to a less extent those of the United Provinces, the Punjab, and Hyderabad have to depend upon yarn imported from mills established in other Provinces and States as well as from abroad. The consequence of this geographical difficulty is that the weavers have to pay a higher price owing to transport charges as well as the necessary multiplication of intermediaries. There is, therefore, much point in this proposal. In some centres, we have found

small spinning mills, such as the Gajanan and the Balaji Mills of Sangli, which suggest that small spinning factories can also be profitable, especially if combined with weaving. We are doubtful, however, whether the same can be said of small spinning mills catering for individual handloom centres. In the first place, the demand for yarn of weavers in such centres is for a variety of counts and qualities of yarn and any one mill is not likely to cope with it in an economical manner, and the only alternative is for the handloom centre concerned to specialise in the production of cloth requiring a definite range and a definite quality of yarn. Secondly, such a mill will have to face the fierce competition of bigger mills producing yarn much more cheaply owing to the adoption of a larger scale of production. The Marwari Chamber of Commerce of Calcutta has placed before us a proposal for starting two big spinning mills in Bengal with dyeing and bleaching arrangements exclusively supplying yarn to the handloom industry in the Province. It is suggested that the Government should invest half of the capital and give the management to experienced business men. The Chamber is prepared, if necessary, to arrange for the assistance of such persons and to contribute the other half of the capital. If big spinning mills are established under private management but under some sort of official control, and with the aid of Provincial or State Governments especially, in areas which are yarn consuming but not yarn producing, it will be of much use to the industry. This may also enable the Governments concerned indirectly to control the yarn market in the area by providing an element of fair competition in the market.

207. *The supply of designs.*—Another important measure essential to the future development of the handloom industry is the continuous supply of new designs, which will enable it to hold its own against the competition of mills using fresh designs for pushing sales. In some of the Provinces and States, the supply of designs is undertaken by the Departments of Industries. In the Punjab, for example, marketing organisations, the Arts and Crafts Depot, industrial institutions, and peripatetic weaving parties supply designs to weavers in important centres. In Central Provinces and Berar, the Department of Industry organises demonstration parties, which supply designs, among other things, to the weavers. In the United Provinces, the Government School of Arts and Crafts has made arrangements for training in designs in some of the industrial arts, but there is not much attention given to textile designs. In the research section of the Central Textile Institute, Cawnpore, and in the design section of the Weaving Institute, Benares, however, designers are engaged since the inauguration of the grant-in-aid scheme. The designs produced are passed on to the weavers through the production stores started by the Department of Industries. In Bihar, similarly a large number of patterns of furnishing fabrics and staple cloth have been standardized and introduced, and in consequence it is claimed " that the improvement in Bihar hand-woven textiles in the recent years in respect of quality and design and texture has been remarkable' '. In Assam, Bengal, and Orissa, and elsewhere designs are being supplied under the grant-in-aid schemes. Similarly, in the Mysore State there is a peripatetic weaving demonstration party in each district for the supply of new designs. Apart from peripatetic parties demonstrating designs, suggestions have been made for the exhibition of up-to-date designs at Industrial and Commercial museums, or at the production stores and also that there should be competition in

designmaking. It has also been suggested that sample designs with details should be distributed to weavers through sale depots and societies. Further, as Dr. Sudhir Sen suggests in a memorandum submitted by him to us, there must be legal protection of patent rights for the designs thus invented and introduced. He further states that there should be industrial arts schools along the lines of the *Kunstgewerbeschule* in Germany with branches in suitable places, which should among other things, study and produce designs for the handloom industry.

208. *Finishing of hand-woven cloth.*—We found a considerable difference of opinion in regard to the finishing of handloom fabrics amongst weaver's societies and others. According to some, handloom fabrics require no finishing at all, while others are of the opinion that they would look better and also fetch a higher price if finishing were done. Some Provincial Governments support the idea, but we came across several co-operative societies, especially in Madras, opposing it on the ground that the handloom fabrics would look like mill cloth and loose their characteristic strength and feel. It was also stated that the *Swadeshi* movement has led to a preference for unbleached and uncalendered products. But it appears that the market outside this section of consumers is much larger and in order to tap this wider market, finishing may be a necessity. Not all fabrics, however, are likely to benefit by this. Broadly speaking, shirtings and coatings, as well as other fine fabrics of counts above 40s, in our opinion, do require finishing, if they are expected to stand the competition of mill cloth of the same varieties. On the other hand, in regard to most speciality fabrics including saris, finishing may not be very helpful, although the Director of Industries, Mysore, is of the opinion that even silk saris woven on handlooms may look more attractive and fetch better prices after light calendering. Likewise, the Millowners' Association, Bombay, think that special types of finishing would be desirable in certain classes of high-priced fabrics intended for the export trade.

The more important question to our mind is what type of finishing appliances would be economical and would suit the needs of the handloom industry properly. There is a unanimity of opinion that the installation of a modern finishing plant would not be economical for the reason that the plant, having a large capacity, is likely to remain idle for want of adequate work, thus entailing high overhead charges. On the other hand, there are certain old fashioned methods, for finishing which may be usefully popularised. In Baroda, for example, finishing is being done by spraying water, folding the cloth and beating it with a wooden hammer, and sometimes also by passing it through heavy rollers. In the United Provinces, coloured and silk goods are finished by beating. A mallet of tamarind wood is used to beat the piece on a plank with a bulging back. This is called *kundi* and is very popular in Benares, Mau, etc. Hand-finishing has been tried at Gorakhpur (U. P.) also and found successful. Finishing of hand-woven cloths in Madras is done by dhobis, and is regarded to be economical. Some dyeing factories, as in the Salem District, also undertake finishing of hand-woven fabrics. On the other hand, power-driven bowl calenders, have also been installed at some centres and found fairly economical and useful. Such are found, for instance in Tanda, Mau, Etawah and Barabanki in the United Provinces,

Gulzarbagh in Bihar, and Amritsar, Hoshiarpur and Ludhiana in the Punjab especially for rayon and woollen goods. Two calendering plants working at Papinesseri and Cannanore in Malabar and a similar one at Madura have done the calendering of over 3 million yards of hand-woven shirtings, coatings and bed-sheets during 1939-40, at rates varying from 1½ annas to 2½ annas per piece of 24 yards. On the other hand, a calendering plant installed by the Madras Handloom Weavers' Provincial Society in the city of Madras appears to have been a failure owing to insufficiency of cloth sent for calendering. Similarly in the United Provinces, it was found that a centralized finishing plant would not be economic, and hence four or five smaller plants were obtained by subsidizing individuals or firms which were allowed to undertake finishing of cloths other than hand-woven. In any case, it appears that modern calendering can only be profitable if it is done on a very large scale. Reasonable economies and fair success can be expected of a plant catering for a very large number of handlooms, say, 10,000 or 20,000 (as suggested by the Aaron Spinning and Weaving Mills), concentrated in a comparatively small area and producing cloths which require calendering. Otherwise owing to the cost of transport on account of sending the cloth to the calendering centre and back again, the procedure is likely to be an uneconomical one. This can perhaps be obviated if there is a strong central sales organisation, such as the marketing section of the Indian Handloom Industry Board projected by us in the last section of this Chapter. For the success of a modern finishing plant it would appear necessary that weavers take to the production of standard types of goods. However, the test for the success of any finishing arrangements of the modern type would be whether, by finishing the cloth, a new demand can be created or the existing demand stimulated or at least maintained.

209. *Certain suggestions regarding marketing.*—The handicaps of the handloom weavers in pushing through the production and sale of their products on account of the absence of standardization have been dealt with already in paragraphs 94 and 126. It may be stated here that such standardization is likely to benefit the handloom industry as a whole greatly and it would pay the industry if an organization is started which would standardize the qualities of the cloth in respect of reed and picks per inch in each range of counts and quality of cloth. This would be advantageous to the consumers as well, because if the consumer knows what he is buying then naturally at every time of replenishing his needs he would be guided by his previous choices. The need for standardization of handloom products therefore is great from many points of view. Likewise in Chapter VII, paragraph 125, we have at some length dealt with the difficulties of transport, which the handloon industry has to face and have offered certain suggestions for consideration. The principal suggestions are that there should be no differential rates, as between the mill and the handloom industry, arising from distance, form of packing or the unit of consumption, and also that other handicaps such as terminal taxes and octrois or unauthorised payments should be removed. In paragraph 131, we have discussed certain special problems regarding the Madras handkerchiefs trade, such as the difficulties in exporting these fabrics to the West African colonies caused by the peculiarities of the English patent law. In paragraphs 127 and 134, certain specific suggestions for the encouragement of the handloom trade have been made

specially in relation to publicity and propaganda, and regulation of export trade, through the agency of the Indian Trade Commissioners and others. In Chapter X, paragraph 179, we have dealt with the question of exploring new markets especially for speciality fabrics in and outside the country.

210. *Technical guidance.*—It was not possible for us within the short time at our disposal to go into problems of technical guidance and we propose to make only a few remarks regarding the subject. This question must be considered from the points of view of educating the weaver as well as from that of training the expert. (*a*) *The weaver:* The peripatetic demonstration parties in most Provinces are teaching the weavers the use of improved appliances such as jacquards, dobbies, etc., and also new fabric structures. Attempts must now be concentrated on the improvement of the ordinary qualities of cloth woven by the weavers for the masses. It is, however, true that by widening the outlook of the weavers in regard to the newer structures of fabrics, we can expect a diversification of the products and improvement of the existing styles in respect of colour, design, border, etc. (*b*) *Training of experts:* Students with a good general education must be selected and trained in all branches of the industry. The experts' training must include the buying and selling of the raw material and finished products as a necessary course. The training should include a course so that the students can have a proper perspective of buying and selling operations. In the textile institutions it appeared to us that more attention is paid to the structural side of the fabrics than to the actual type of fabrics which are in demand in the local market. No opportunity is afforded to the boys also to get an inside knowledge of the business. Therefore, when these boys come out of the schools, they possess a knowledge of manufacturing a variety of fabrics on different weaves, but they do not know the particular type of fabrics which should sell and is likely to yield a profit to them. The defect of this knowledge in our opinion has led to a number of failures of the factories started in Bengal on loans advanced by the Industries Department there under the State Aid to Industries Act. These loans under the rules have to be repaid within a specified period. In the case of failure, the factory started on the loan is closed down and the factory is sold and the money realised. At the very start, for want of experience these boys lose and are unable to pay off the debt with the result that the factories have to be closed down and they cannot start again when they have the necessary experience of the commercial side of the business. It appears necessary, therefore, that a good deal of attention should be paid to the commercial side in these schools.

211. *Government patronage.*—An important proposal placed before us is in relation to Government patronage being extended to the handloom industry. The Government of India as well as the Provincial and State Governments require a considerable quantity of cloth of various kinds, for the purpose of uniforms for officers and the inferior staff in their various departments. In particular the Military Stores Department requires quite a considerable quantity of tent cloth, mosquito nets, *dosutis*, bandage cloth, gauze, etc., which can be supplied by handlooms. Similarly in the Provincial and State hospitals, jails and other institutions and in Police and Excise departments varieties of cloth are required which can be supplied by the handloom industry quite as efficiently as by others. In this connection, the Southern India Chamber of Commerce have placed some figures before us for the official

demand for cloth of all kinds for permanent establishments in the Province of Madras. The total of the cloth requirements amounts to 1·7 million yards, and adding another 25 per cent for temporary establishments, it may amount to nearly 2 million yards. We have not been able to obtain similar figures for other Provinces, but on a moderate estimate, we are inclined to think that the total requirements of cloth for such purposes in India as a whole, excluding those of the Supply Department, would amount to about 20 million yards. It should be possible for the Provincial and State Governments, in particular, to extend a substantial part of this patronage to the handloom industry. In this connection, we may also stress the importance, from the immediate point of view of placing with the handloom industry as large a part as possible of the war orders for textiles and, if possible, some part of the orders for the proposed standard cloth. It may be hoped that the introduction of standards into handloom production will also enable the Government to utilize the services of the handloom industry to a greater extent than hitherto. Such a step, as we have explained in Chapter X, would also be necessary on the ground of military defence. The handloom, serving as a second line of defence in the supply of cloth to our defence forces, is bound to be helpful in a period of emergency.

III. An All-India Organisation.

212. *Need for a Central Organisation.*—We have in this and the previous Chapter considered various measures for assisting the handloom industry. We have shown that the handloom weaver will be helpless without the aid of some organisation for the supply of yarn and credit to him for the marketing of his finished goods. Whether through a co-operative society or a licensed mahajan functioning near at hand, he must be given these facilities at reasonable cost. Provision will therefore have to be made for a network of co-operative societies throughout the country, so that no weaver who needs co-operative assistance should be without it. The co-operative society will be affiliated to the Provincial co-operative organisation, from which it will obtain its credit and marketing facilities. Similarly the licensed mahajans will also have their Provincial or State organisation for common purposes. Such an organisation cannot work without the co-ordinating activity of a public body at the head of it. Mr. J. M. Doak, Manager of the Madura Mills, in his memorandum, has suggested to us that an All-India Handloom Industry Board should be established on the same lines as the Indian Central Cotton Committee. According to Mr. Doak, the functions of this Board would be "to administer the grants-in-aid from the Government of India and generally to protect and foster the handloom industry of India". Similar suggestions have been made by many other persons with long experience of the hand-weaving industry.

213. *The constitution and functions of the Indian Handloom Industry Board.*—We have given some thought to this suggestion and we consider it a very valuable one. The Indian Handloom Industry Board may be established as a semi-public corporation somewhat on the lines of the Milk Marketing Board and other similar organisations working in the United Kingdom and must have on its governing body officials, representatives of handloom interests, and leading business men of the country with long experience in textile matters. The functions of the Board will be mainly three-fold, namely,

(*a*) Research, (*b*) Supply of Raw Material, and (*c*) Marketing. Corresponding to these three functions, there will be three separate committees of the Board in charge of the three branches of its activity. In regard to research, the principal function of the Board will be to encourage and co-ordinate the work now going on in the technical institutes maintained in the various Provinces and States. It will also have to conduct research independently on the economic as well as technical problems of the industry. It will also serve as the agency for pooling and disseminating the available technical and economic information. In regard to raw material, the Board will have to make arrangements for the supply of yarn and dyes to the handloom weavers, negotiate with the mills for bulk purchases wherever necessary, maintain yarn depots where such are found essential, and watch the transactions of yarn dealers and attend to licensing regulations. Perhaps the most important of the Board's functions will be the marketing of handloom cloth both in India and abroad. The marketing branch of the Board will collect orders through its selling agents and pass them on to the Provincial organisations. Through its travelling agents and by contact with India's Trade Commissioners abroad, the Board will be in constant touch with the foreign markets for handloom products. It may conduct marketing and production surveys both of handloom markets and centres. The yarn depots, where they are set up, may also be used as an agency for collecting cloths. The Board may maintain sales depots wherever advisable and in other cases sell through merchants. In regard to the headquarters of the Board, Mr. Doak says: "The natural headquarters for the Indian Central Cotton Committee is of course Bombay ..... In the same way the headquarters of the Handloom Industry Board could well be Madras, periodic meetings being held in other Provinces." Wherever the headquarters of the Board may be, branches will have to be opened in the various Provinces and States, or the Board may work through the existing co-operative or other organisations. In any case the new organisation must be co-ordinated with the existing weavers' co-operative movement. It would also be advisable to distribute through this body the grant-in-aid from the Government of India to the Provinces which we hope will be continued.

It is essential that the States should also be represented on this Board and it is our hope that they will take an active part in its work. As will be seen from references elsewhere in the Report, several States are taking great interest in the handloom industry and it is very probable that they will welcome such a move for an all-India organisation.

214. *Financial assistance.*—We have every reason to think that, the marketing organisation of this body, if properly managed, will eventually bring in enough profit to cover all the expenses of the Board, but in the first few years a substantial grant from the Governments will be necessary. Mr. Doak suggests that it might be possible to divert from the Indian Central Cotton Committee to the All-India Handloom Industry Board such part of the proceeds of the present cess on cotton as represents yarn intended for handloom use. He also thinks that, as in the case of the Indian Central Cotton Committee, the Provincial Governments could be asked to make contributions towards particular schemes on the basis of 25 per cent of the total cost. These two sources would, in his opinion, bring in Rs. 8 to Rs. 9 lakhs annually to the Board. The Registrar of Co-operative Societies, Madras

suggests that the proceeds of the Madras sales tax on cloth may be handed over to the Board, presumably for being spent for the benefit of the handloom industry in that Province. All these sources, however, may not be adequate in the first few years to maintain an all-India body charged with such important functions and it may be necessary to look for other sources. In view of this, apart from the measures suggested by Mr. Doak, we think it may be necessary to adopt certain fiscal measures. Several proposals have been placed before us by representatives of Provincial Governments and weavers' associations. We do not, however, feel that we are called upon to deal with any fiscal measures as such for revenue purposes. At the same time, there are two or three proposals which merit attention as being necessary from the double standpoint of providing funds for any constructive work in support of the handlooms as well as of incidentally safeguarding their interests against the severe competition of mills and powerlooms. Whatever be the nature of measures adopted, however, we should like to reiterate the conditions-precedent, started in connection with the restriction of counts, *viz.*, (*a*) that there should be adequate compensation by way of a countervailing duty on imports, (*b*) that powerlooms should be subject to similar measures, (*c*) that by reciprocal arrangements the States also should be persuaded to adopt the measures, etc. Subject to this, the following two measures appear to us to be worth consideration :—

(I) *A cess or duty on mill and powerloom production to be imposed by the Government of India.*—Several proposals have been made to us for some sort of duty on mill production. The Madras Director of Industries, among others, for example, suggests the levy of an excise duty on all yarn manufactured by mills for consumption in its own weaving section or for supply to another mill. The idea underlying this proposal appears to be two-fold, to discourage weaving in mills to some extent and to encourage the sale of yarn to handlooms. The difficulty, however, is that mills may supply yarn to each other through the agency of a third party, who is not the owner of a mill himself specially if the cess is levied at a high rate. The Government of Bombay in reply to the Commerce Department letter in 1940 put in a similar plea for the imposition of a cess on mill yarn used by the mills themselves. It was proposed that the cess should be at the rate of 1 pie per lb. and that the proceeds should be distributed amongst the Provinces for assisting the handlooms. A very moderate cess of the kind suggested may not perhaps impose any great hardships, as it works out only at Rs. 2-1-4 per bale of 400 lbs. A third way of achieving the same purpose would be to levy a small cess on mill-made cloth, a proposal which was accepted on general grounds by the Tariff Board (who recommended a cess of 3 pies per lb. of cloth) in 1932 but dropped owing to the difficulties of taking simultaneous action in the States. These difficulties, as pointed out by the Government of Bombay in their reply to the Commerce Department letter, can now be overcome, as they were in the case of match and sugar excise duties. This proposal has also found some support on the ground that it would not be possible for mills to avoid paying such a small cess (of, say, one pie per lb., imposed on mill cloth) and further that it is likely to be borne lightly by the mills. In any case it may not be advisable to impose a duty of any kind on the mill production of particular types of cloth, such as dhotis, saris, *zenani* goods, etc., for the reason, stated earlier in this Chapter that it is impossible to define such terms in a precise and legal manner.

(II) *A Provincial sales tax on mill cloth.*—Another important proposal placed before us is in regard to the imposition of a sales tax in the Provinces. Such a tax has already been imposed in the Madras Province and a part of the proceeds of the tax, it is stated, is being utilised for subsidising hand-spinning only in the Province. The merit of this tax is that it automatically falls equally on imported and powerloom-made as well as mill cloth. But care must be taken that the tax is not excessive, that it does not cause any shifts of production from the Provinces to the States (which should also be persuaded to adopt the measure) or between the Provinces themselves, *i.e.*, by levying the tax at the same rate throughout India.

215. *Is the financial burden justified?*—It may perhaps be asked, why a financial burden should be placed on the community in order that succour may be given to handloom weaving. No elaborate answer to this is necessary in view of all that has been said in the foregoing pages. It is in the national interest that the handloom industry should be preserved because it is the largest single industry in the country and the cottage basis on which it is organised is in keeping with not only the dominant social outlook but also the best economic interests of India. The serious military dangers of a country depending on centralized large-scale industries have been amply demonstrated lately. We in India are fortunately able to avoid such a calamity by maintaining a decentralized cottage industry side by side with a large-scale industry concentrated at some points. Further, the decay of an industry on which as many as 10 million people depend will be a serious calamity, in view of the lack of alternative occupations and the heavy pressure already borne by land. Fortunately, the position of the industry is such that it needs only a little help and not a bolstering up. Therefore, it would be best to incur this cost in time and thus avoid a worse calamity. It may also be noted that even a slight rise in the standard of living of such a large population as the handloom weavers will have beneficent, economic and social repercussions, of a far-reaching character.

216. *Handlooms and mills: a final view.*—Many experienced persons with whom we discussed these problems expressed the view that a heavy responsibility in this matter falls on the other and more opulent section of the textile industry, *viz.*, the mills. Three-fourths of the market which once belonged wholly to the handloom are now in their hands and some of the protective measures (whose monetary value runs into crores of rupees), undertaken by the Government in aid of the mills (*e.g.*, the import duty on yarn) have hit the handloom industry, as has been admitted on all hands. As compared to the financial benefits of tariffs derived by the mill industry, the Government grant-in-aid to the handloom industry of Rs. 5 lakhs has been a paltry affair. Nor may it be necessary to give financial aid to the hand-weaving industry for long, because with proper arrangements in regard to yarn supply and marketing, the hand-weaving industry may soon be able to stand on its feet again. It is, therefore, up to the mills to hasten that day by suitable ministrations for which they have accumulated valuable experience in the past. The mills have received generous aid from the country in their time of need; it is now their turn to give a helping hand to an elder and weaker sister-industry.

The Millowners' Association, Bombay, in their memorandum state that collaboration between mills and handlooms would be possible in the exploration of export markets, provided the handloom "concentrates on the

production of those particular cloths and types of design and cloth structure in which it has definite advantages over the powerloom industry". It is for the mills to see that such a collaboration takes place, by actively helping to set up and work the Indian Handloom Industry Board suggested above and by exerting their influence to expand the markets for the hand-woven speciality cloths.

217. *Conclusion.*—We have tried to view the relations between handlooms and mills with all the impartiality we are capable of. We consider both the mills and the handlooms as necessary to the economic prosperity of this country. They have a great many common interests to safeguard, and by careful planning their interests can be made much more compatible than they are to-day. As we have shown in Chapter VIII, a natural adjustment between the spheres of the two industries has been slowly taking place and by deliberate direction this can be made more complete and fruitful. Calm consultations between mill and handloom interests under the auspices of Government will pave the way for a fuller understanding between them and for an amicable settlement of differences. It is our hope that conferences between mill and handloom interests will be convened frequently and that decisions in regard to future policy will be taken, so far as possible, by mutual agreement.

The handloom has survived, and will survive. The question is whether it will survive as a relic of primitive economy, a symbol of sweating and low standard of living. Or will it survive and grow strong as the corner-stone of a healthy, decentralized modern economy which will maintain in freedom millions of families on a reasonable standard of comfort, while ensuring to the population at large a steady supply of clothing even in times of possible insecurity? The answer to this question will depend on the wisdom and forethought which the present generation in India will be able to bestow on this very important problem.

CHAPTER XII.

Summary of Findings.

(The figures in brackets at the end of each summary refer to paragraph numbers.)

1. The old hand-weaving industry using hand-spun yarn decayed during the first half of the 19th century, and along with it hand-spinning, which till then provided a subsidiary occupation to the agricultural masses, also practically disappeared (6).

2. In its place grew a new hand-weaving industry depending upon the use of mill-spun yarn, at first imported, later Indian mill-made (7).

3. The markets for handloom cloth, however, were maintained and even extended, up to 1914 helped by the rising Indian spinning industry, the fiscal policy of the time, the *swadeshi* movement, etc. (8-9).

4. During the war (1914-18) the handloom industry suffered a serious setback, but a partial revival occurred during the post-war period. At the same time the competition from Indian mill production was also growing (10-11).

5. The textile tariff policy of the Government of India benefited the mills more than the handlooms. The import duty on yarn, in particular, placed a definite burden on the handlooms. The *khaddar* movement also handicapped the handloom industry by the ban placed on the use of imported mill yarn (12-13).

6. Meanwhile the radical changes that occurred in the clothing habits of the people all over the country, coupled with growing mill competition, affected the handloom industry adversely (14-15).

7. The silk handloom industry also suffered a decline owing to the imports of artificial silk goods from outside as well as the internal development of the artificial silk industry (16).

8. There has been a fall in the exports of handloom products from India in recent years (17).

9. The rise of powerlooms other than mills in recent years has also affected the handloom industry (18).

10. After the world economic crisis of 1929-30 the condition of the handloom industry and the weavers became very bad (19-20).

11. The various measures adopted by the Provincial and State Governments as also by the Government of India, in aid of the handloom industry and the circumstances leading up to the appointment of the Fact-Finding Committee have been detailed (21-23).

12. The total number of handlooms in India has been estimated at about 2 millions on the basis of the data supplied by the Provincial and State Governments (25).

13. Looms have been classified according to (1) the kind of textile used, and (2) the type of loom, throw-shuttle, fly-shuttle, etc. It has been found that the majority of looms are (1) cotton-weaving and (2) throw-shuttle, although much progress has been recently made in the introduction of fly-shuttle sleys in some Provinces (27-31).

14. The number of weavers (full-time and part-time) has been estimated at about 2½ millions, and of assistants (paid and unpaid) at another 3½ millions and the total population depending on the industry at about 10 millions (32).

15. From a rough comparison of the chronological figures for the weavers during the present century, a declining trend is indicated (33-34).

16. The number of powerlooms in India has been estimated at about 15,000 (35).

17. A bird's-eye view of the geographical extent and distribution of the handloom industry in India (36).

18. As there are at present no reliable statistics of handloom production, it has to be estimated by the "residual" method, *i.e.*, on the basis of the residue left after the estimated consumption of the "free" yarn (yarn left after consumption by the mills); by hosiery factories, powerlooms and various non-textile uses. The yarn can then be converted into yardage of cloth (37-44).

19. Handloom production has also been estimated independently on the basis of the number of loom-hours worked in the year in the various Provinces and States, at 1477·4 million yards to which has been added another 140 million yards for production in other States and excluded areas, thus giving the grand total of 1617·4 million yards for all India (45).

20. The direct estimates of handloom production supplied by Provinces and States give a total of 1643 million yards for the handloom production of cloth from mill-spun yarn (46).

21. The value of hand-woven cloth per annum has been estimated at Rs. 72·8 crores for all kinds of cloth—cotton, silk, artificial silk, wool and mixture (47).

22. It has been found that hand-weaving is a full-time occupation for the large majority of the people engaged in it (50).

23. While most of the weavers belong to the hereditary weaving castes like the Salis, Devangas, Koshtis and Khatris among Hindus and Jolahas or Momins among the Muslims, there have also been lately new entrants into the profession (51-52).

24. The rural hand-weaving industry of old is tending largely to be an urban handicraft while there is also a noticeable localisation of the industry coupled with a great deal of geographical specialisation (53-56).

25. In place of the old craft-guilds working on caste basis, there have lately arisen some organisations of a modern type in some parts of the country (57).

26. With the increased use of mill yarn independent weavers diminished and a large number of weavers came under the mahajans (some of whom being professional weavers). With the growth of *karkhanas*, many have come to work in them (58-66).

27. A general review of the economic stratification among the weavers, the economic status of the various strata, wages and earnings, regularity of employment, general economic condition and the growth of labourers' and employers' organisations (67-72).

28. The importance of yarn for the handloom industry and the existing marketing organisation for its supply are discussed with particular reference to the handicaps of the weavers in obtaining their yarn through a chain of middlemen and to the practicability of the mills selling yarn direct to the weavers (73-76).

29. Not only are the prices of yarn for the weavers high owing to "pyramiding" caused by the intervention of too many middlemen, but there are also certain malpractices in the yarn trade to be reckoned with, which necessitate a minor emendation in the Indian Merchandise Marks Act (77-83).

30. It has been found that the weavers use various ranges of counts and also different kinds of yarn like cotton mercerised, silk, artificial silk, etc. Generally, for lower and medium counts they depend on Indian mills while for higher counts they depend mostly on imported supplies (84-88).

31. The quantity of hand-spun yarn produced in India has been estimated at 66 million pounds and its consumption by handlooms at 54·4 million pounds (89).

32. An examination of the figures for consumption of yarn classified according to counts reveals that in the case of both mills and handlooms (and to a larger degree in mills than in handlooms) the bulk of production of cloth consists of counts 20s and below (90).

33. The special merits of handloom production as also some of its defects considered (93-94).

34. The types of handloom fabrics in general use and their relative importance in different Provinces discussed (95-96).

35. A survey of principal handloom fabrics in different Provinces and States (97-115).

36. Production costs of handloom fabrics examined. It has been found that material forms from 35 to 83 per cent and labour from 17 to 65 per cent of the total cost of production. The proportions vary widely from Province to Province and even from centre to centre (116).

37. Barring one or two Provinces like Assam and the Punjab, the consumption of handloom products by the weaver himself is very small, a very large proportion being for sale in the local, inter-Provincial or foreign markets (117).

38. The agencies for marketing of handloom products are usually the *sowcar*-weaver or mahajan with the assistance of the wholesaler or retailer, the weekly fair, *shandy* or *hat*, regular markets in small and large towns called *sattis*, *penths* or bazaars. There are also Governmental or private institutions doing marketing (118-121).

39. The present organisation of the marketing of handloom products is a very costly one from the weavers' point of view and the margin of the middleman's profit is also considerable ranging up to 47 per cent. Further difficulties are also experienced on account of transport and want of standardization of handloom goods (122-126).

40. There is great need for publicity and propaganda if the markets for handloom products are to be expanded (127).

41. Some handloom fabrics like the Madras handkerchiefs, sarongs and lungis command a considerable export market in the countries of the African and Asian littorals. Such export trade, however, has been suffering a decline in recent years owing to many factors such as the mill competition, change of fashions and difficulties encountered in the matter of export. The entire export trade in handloom fabrics appears to be defective and the system needs proper organisation (128-134).

42. On the question of the competition between mills and handlooms extremely divergent views have been expressed to us (135).

43. The mill competition, however, seems to have developed more seriously after 1925 due to certain favourable factors for the mills like the fiscal policy of the Government, change of fashions and improved transport (136).

44. The question whether the mills have replaced handloom-cloth in the aggregate is extremely difficult to decide. At the same time, however, it looks probable that in particular categories of cloth, especially dhotis, saris, etc., the mills have encroached upon the handlooms, although even this is hard to prove owing to the lack of the necessary statistical data (137-138).

45. As regards competition under counts the effect of mill competition is differently felt in different Provinces, those weaving higher counts generally suffering more (139).

46. As regards fabrics, competition has been going on between mills and handlooms in many ways—"apparel" competition and "quality" competition, signified by the change of fashions, and "direct" or "price" competition which may be reasonably regarded as competition proper (140-143).

47. In saris competition is most serious in counts 20s to 40s. Even in higher counts there has lately grown powerful mill competition. In the case of dhotis also direct mill competition is in respect of medium counts. In gumchas, chaddars, shirtings and coatings also mill competition of a serious nature has developed (144-148).

48. Cases of some unfair mill competition as also of some competition in the handloom industry itself have been alleged before us (149).

49. While encroachment in styles of goods has been mutual between mills and handlooms the effects of such have been more adverse on the latter than on the former (150).

50. A recent development is the competition from powerlooms which is being felt both by handlooms and even by mills in some cases (151).

51. It is extremely difficult to assess statistically the consequences of mill competition on the handloom industry. It may be stated, however, that competition has been keenest in areas like Bengal where white clothing has been in vogue. Due to mill competition there have also occurred several significant adjustments in the lines of production by the handlooms both in respect of counts used and fabrics produced (152-154).

52. The early efforts in weavers' co-operation during 1905-1935 made in different Provinces were mostly failures or even where they did not fail the scope of the work was very limited (155-156).

53. In 1935 the co-operative movement was re-organised and put on a more sound basis under the aegis of the Government of India subvention

scheme for the handloom industry. The grants made to the different Provinces have been utilised in different ways; nor has there been any uniformity either in the control of such grants or in the *modus operandi* in the various Provinces. Generally the grants have been utilised for improving the marketing and financial facilities of the weavers and their productive technique (157-159).

54. The extent of benefit derived from the grants has varied greatly from Province to Province. However, while a good beginning has been made, it is clear that only the fringe of the problem has been touched. If greater success is to be achieved a proper planning of production and marketing is necessary (160-162).

55. The indigenous co-operative institutions operating among the handloom weavers may be utilized with advantage in the reorganization of the industry wherever possible (163).

56. Further advance will depend on the greater association of businessmen, and the co-ordination of the scattered activities by an all-India organisation [163 (*a*)].

57. It is apparent that the total production of cloth by handlooms has been maintained and even slightly increased since 1920. But it is also clear that such increase has not brought any corresponding prosperity to the handweavers. Such increase as has taken place is largely due to technical improvements and the helplessness of the handloom weavers who pursue weaving as their hereditary profession (164-166).

58. On the other hand there is reason to believe that both the total earnings of the handloom industry and those of the individual weavers have fallen drastically during the last 10 or 15 years (167-168).

59. However, it is not correct to consider hand-weaving as a decaying industry. Owing to timely adjustments, the industry has done good work in many areas (169).

60. Among the favourable factors now operating for the preservation of the handloom are its technical superiority in special fabrics, the durability of handloom cloth, the conservatism especially of women-folk, etc. But the unfavourable factors now operating are perhaps more potent, and left to itself the handloom industry may dwindle to the position of a small handicraft concentrating on speciality fabrics (170-172).

61. Various economic, social and military grounds which have been urged for fostering the handloom industry considered (173).

62. Hand-weaving is not a primitive industry, and there is no question of bolstering it up; hardly any of the other handicrafts can establish a similar claim for protection (173-174).

63. The claim that hand-weaving ceases to be a cottage industry because it uses mill-spun yarn considered (175).

64. The causes of the low earnings of handloom weavers and lines of remedial action (176).

65. It may be desirable to make the handloom industry complementary to mills, but this does not seem practicable (177-178).

66. In view of the dangers of dependence on distant markets, a certain degree of local self-sufficiency seems desirable (179-182).

67. The necessity for internal reorganisation considered (183).

68. The necessity for a network of co-operative institutions and perhaps joint-stock organisations considered (184-186).

69. Although the development of the *karkhana* system seems advantageous in some ways, its results will have to be watched carefully (187).

70. On the whole the domestic system of production which is so well established in the country appears satisfactory and no adequate reasons have so far been found for disturbing it (188).

71. The proposal for the delimitation of fields between mills and handlooms by restriction of counts is considered from various points of view (189-197).

72. The proposals for the abolition of weaving in mills and the restriction on mills regarding additions to their looms considered (199-200).

73. If a system under which the mills supply yarn direct to the weavers and take back their cloth for sale could be introduced it would help the handloom industry (201).

74. The proposal for the reservation of some types of cloth for the handloom weavers discussed (202).

75. The proposal that mills should be prohibited from using dobbies and jacquards considered (203).

76. For the supply of yarn the possibility of establishment of depots by Government or by the spinning mills themselves is worth consideration (204-205).

77. The proposal for the establishment of spinning mills at important handloom centres considered (206).

78. The supply of designs may be made through peripatetic weaving parties, industrial and commercial museums and industrial art schools (207).

79. The finishing and standardization of handloom cloth, technical guidance, and Government patronage also seem necessary for pushing production and sales (208-211).

80. For co-ordinating all the efforts regarding the handloom industry, an Indian Handloom Industry Board may be established as a semi-public corporation (212-213).

81. Various proposals for obtaining funds for the Board considered, including a cess on mill-made cloth (214-215).

82. The need for reconciling the interests of handlooms and mills stressed (216-217).

P. J. THOMAS,
Chairman.

B. P. ADARKAR,
Secretary.

H. MOOKHERJEE,
Member.

NEW DELHI;
28th February 1942.

APPENDIX I.

Press communique issued by the Fact-Finding Committee on the 27th January 1941.

The Government of India in the Commerce Department Resolution No. 110-Ind.(16)/40, dated the 25th January 1941, have constituted a Fact-Finding Committee (Handloom & Mills) to investigate certain facts relating to the handloom and mill industries. The Committee consists of Dr. P. J. Thomas (Chairman), Rai Bahadur H. Mookerjee (Member) and Mr. B. P. Adarkar (Secretary). The terms of reference of the Committee are as follows :—

(1) To make a survey, with the assistance of Provincial and State Governments, of the extent of the handloom industry in each province and state and of the kinds of handloom products produced and the number of persons engaged in the industry ;

(2) To make a report on the marketing organisations both for the purchase of yarn by the handloom weavers and for the sale of the handloom products ;

(3) To compare the nature of the products of the handloom industry in each area surveyed with the corresponding mill products and to find the nature of the competition between the two ;

(4) To investigate the kinds of yarn used in the handloom industry and types of production for which different kinds of yarn are used ; and

(5) In particular, to investigate how far an enactment prohibiting the mills from using yarns of low counts would help the handloom industry in maintaining its production.

2. Firms or persons interested who desire their views should be considered by the Fact-Finding Committee (Handloom & Mills) should address their representations (with five spare copies) to the Secretary to the Committee, New Delhi, by the 20th February 1941.

APPENDIX II.

Preliminary letter addressed to all Provincial Governments and States, on the 7th February 1941.

With reference to letter No. 110-Ind. (16)/40, Government of India, Department of Commerce, dated New Delhi the 29th January 1941, I am directed to state that the Fact-Finding Committee (Handloom & Mills) will be commencing their preliminary tour early this month. A copy of their tour programme is enclosed.

2. The Committee desire to invite your attention at this stage to the request of the Government of India in regard to the information pertinent to their enquiry already available with you. It would greatly help the Committee if the available information can be analysed under the following main headings, and given to the Committee in person when they visit your headquarters.

3. (i) The total number of handlooms, and of weavers and workers actually engaged on the looms.

(ii) The total production on the handlooms.

(iii) Kinds of yarns used — Cotton (Indian, or foreign mill-made yarn or hand-spun), silk, artificial silk, wool, or mixture, and the approximate number of looms engaged in each.

(iv) The methods (including finance) by which the weaver is supplied with yarn; the methods (including finance) by which he markets his products.

(v) The various classes of handloom cloth manufactured in the Province specifying the localities where each is manufactured.

(vi) Whether there is any competition between the mill-made and handloom cloth, and if so, in which classes — grey, bleached, dyed, or coloured — and in which counts, such competition directly or indirectly exists.

(vii) Whether it is feasible to prohibit mill production of cloth below say counts of 12s (both in the warp and in the weft), and, if so, what would be the extent of benefit derived by the handlooms as a result of such prohibition.

(viii) Any other material relevant to the terms of reference.

4. The Committee will be glad if you will inform me at your earliest convenience which areas or centres of handloom industry in your Province the Committee could visit with advantage during their preliminary tour. The Committee will be interested during such visits to gather on the spot as much information as is possible regarding the classes of weavers and the categories of their production, and to acquaint themselves generally with the principal markets or fairs which supply the raw materials to the handloom weavers and sell side by side the products of the handlooms as well as the mills.

P. S.—The Committee request that the Tables in the enclosed sheets (special instructions) be filled in, following the instructions given therein.

Special Instructions.

NOTE :—(i) The term "handloom" excludes "powerlooms". In each table or elsewhere information regarding powerlooms may be supplied separately, if possible.

(ii) Underneath each table please explain briefly how the figures have been computed

(iii) The references to paragraphs below are to the paragraphs in the main letter.

(iv) If accurate figures cannot be supplied approximate estimates may be given.

Para. 3 (i). Information may kindly be supplied in the form of a table as follows :—

TABLE I.—*Number of weavers.*

Number of regular weavers.	Number of weavers (as subsidiary occupation).	Total number of weavers.	Number of Assistants.		Total number of weavers and assistants.
			paid.	unpaid.	

TABLE II.—*Number of handlooms.*

	Cotton weaving looms.		Wool weaving looms.		Silk weaving looms.		Total looms.	
	working.	idle.	working.	idle.	working.	idle.	working.	idle.
Throw-shuttle . .								
Fly-shuttle . . .								

TABLE III.—*Consumption of yarn by handlooms.*

	(in lbs.)	(in lbs.)
Cotton yarn . . .	..	Indian mill yarn. Foreign mill yarn Handspun.
Art. silk yarn . . .	..	..
Silk yarn	..	..
Woollen yarn . . .	..	..

TABLE IV.—*Percentage consumption of different counts of cotton yarn consumed by handlooms.*

—	Counts.	Total number of yards produced.
1s—10s		
11s—20s		
21s—30s		
31s—40s		
41s and above.		

TABLE V.—*Total production of cloth on handlooms.*

	Yards	Value (in Rs.).
Cotton		
Silk and artificial silk		
Woollens		

NOTE:—In addition, the average daily production per loom and per weaver, in yards and value may kindly be supplied. With regard to cotton, further details for types of Fabrics (such as grey, dyed, etc.), designs, counts of yarn, the part played by dyes in the handloom industry may be stated.

The above tables refer to paragraph 3, clauses i, ii, iii, v only. For the other queries written information, notes and memoranda will be welcome. Attention is, also, drawn to the terms of reference of the Committee, which have been already supplied.

APPENDIX III.

List of Governments, associations individuals, etc., from whom replies to our questionnaire or representations or memoranda were received.*

(a) Provincial and State Governments.

1. Director of Industries, Assam.
2. Director of Industries, Bengal.
3. Registrar of Co-operative Societies, Bengal.
4. Director of Industries, Bihar.
5. Director of Industries, Bombay.
6. Government of the Central Provinces and Berar.
7. Director of Industries and Commerce, Madras.
8. Registrar of Co-operative Societies, Madras.
9. Director of Development, Orissa.
10. Secretary to Government, Electricity and Industries Department, the Punjab.
11. Director of Industries, Sind.
12. Director of Industries and Commerce, United Provinces.
13. Director of Industries and Labour, Baroda.
14. Director of Industries and Commerce, Cochin.
15. Secretary, Foreign and Political Department, Gwalior.
16. Director of Industries and Commerce, H. E. H. the Nizam's Government, Hyderabad.
17. Commissioner of Customs, Commerce and Industries, Holkar State, Indore.
18. Director of Industries and Commerce, Jammu and Kashmir.
19. Kolhapur and Deccan States :—

    Kolhapur
    Kurundwad (Sr.)
    Ramdurg
    Mudhol
    Janjira
    Jamkhandi
    Savanur
    Sangli
    Ichalkaranji
    Miraj
    Phaltan
    Akalkot
    Aundh
    Jath
    Bhor.

20. Director of Industries and Commerce, Mysore.
21. Director of Industries, Travancore.

(b) Mills, Millowners' Associations and Chambers of Commerce.

22. The Marwari Chamber of Commerce, Calcutta.
23. Aaron Spinning and Weaving Mills, Pappinisserri, Malabar.
24. Bengal Millowner's Association, Calcutta.
25. The Kanara Chamber of Commerce, Mangalore.
26. Silk and Artificial Silk Mills Association, Bombay.
27. Surat Chamber of Commerce and Surat Weaving Association.
28. The Berhampur Chamber of Commerce, Orissa.
29. The Vishnu Weaving Works, Chovva, Malabar.

* For the questionnaire, see Appendix XXXII.

(*b*) Mills, Millowners' Associations and Chambers of Commerce—*contd.*

30. Indian Merchants' Chamber, Bombay.
31. The Elgin Mills Co., Cawnpore.
32. The Cawnpore Textiles, Cawnpore.
33. The Moradabad Spinning and Weaving Mills, Moradabad.
34. The Bihar Chamber of Commerce, Patna.
35. The Millowners' Association, Bombay.
36. Madura Mills Co., Madura.
37. Delhi Factory Owners' Federation, New Delhi.
38. The Marwari Chamber of Commerce, Bombay.
39. The Ahmedabad Millowners' Association, Ahmedabad.
40. The South India Millowners' Association, Coimbatore.
41. The Salem District Chamber of Commerce, Salem.
42. The Southern India Chamber of Commerce, Madras
43. The Indian Chamber of Commerce, Coimbatore.
44. The Binny and Co., Madras.
45. Delhi Cloth and General Mills Co., Ltd., Delhi.
46. The Pankaja Mills, Coimbatore.
47. The Malabar Handloom Factory Owners' Association, Cannanore.
48. The Malabar Spinning and Weaving Co., Ltd., Kallai, Malabar.
49. The Commonwealth Trust Ltd., Calicut.
50. The Mysore Chamber of Commerce, Bangalore.

(*c*) Weavers' Co-operative Societies.

MADRAS.

51. Turaiyur Handloom Weavers' Co-operative Society.
52. Worraiyur Devanga Handloom Weavers' Co-operative Society.
53. Jayangondam Handloom Weavers' Co-operative Society.
54. The Koyamballi Weavers' Co-operative Society.
55. Thathayyanagarpet Weavers' Co-operative Society.
56. Manamedu Handloom Weavers' Co-operative Sale Society.
57. Kottayam Taluk Weavers' Co-operative Sale Society.
58. Badagara Weavers' Co-operative Sale Society.
59. Taliparamba Weavers' Co-operative Society.
60. Kalavai Weavers' Co-operative Society.
61. Mekkalathur Weavers' Co-operative Society.
62. Kunagampudi Pudur Weavers' Co-operative Sale Society.
63. Mansurabad Weavers' Co-operative Society.
64. Kilkodungalur Weavers' Co-operative Society.
65. Gudiyatham Weavers' Co-operative Society.
66. Devikapuram Weavers' Co-operative Society.
67. Mullipathu Weavers' Co-operative Society.
68. Guruvarajapet Weavers' Co-operative Society.
69. Pallikonda Weavers' Co-operative Society.
70. Adoni Swakula Sali Co-operative Purchase and Sale Society.
71. The Ellore Weavers' Co-operative Society.
72. The Uravakonda Weavers' Co-operative Society.
73. The Tadpatri Weavers' Co-operative Society.
74. Dharmavaram Weavers' Co-operative Society.
75. Addepalli Weavers' Co-operative Society.
76. Kanagala Weavers' Co-operative Society.
77. Cherukkupalli Weavers' Co-operative Society.
78. Kathur Handloom Weavers' Sale Society.
79. Kannargudi Weavers' Co-operative Society.

(c) Weavers' Co-operative Societies—*concld.*

MADRAS—*contd.*

80. The Koranad Weavers' Co-operative Society.
81. The Udipi Weavers' Co-operative Sale Society.
82. The Kasargod Weavers' Co-operative Society.
83. South Kanara Handloom Weavers' District Co-operative Society.
84. Ujre Weavers' Co-operative Society, Puthur Taluk.
85. Perla Satyanarayana Weavers' Sale Society.
86. The Nileshwa Weavers' Co-operative Society.
87. Puttur Co-operative Weavers' Sale Society
88. Pullampet Weavers' Society.
89. The Chinnasalem Weavers' Sale Society.
90. Yemmiganur Weavers' Co-operative Sale Society.
91. Rajapuram Handloom Weavers' Co-operative Society.
92. Vizianagaram Weavers' Co-operative Society.
93. Pedathamrapalli Handloom Weavers' Co-operative Society.
94. Kollengode Weavers' Co-operative Society.
95. Palakonda Weavers' Co-operative Society.
96. Ekkadu Weavers' Co-operative Society.
97. Reddipettai Silk Weavers' Co-operative Sale Society.
98. Arni Weavers' Co-operative Society.
99. Munnal Weavers' Co-operative Society.
100. The real Madras Handkerchiefs and Sarams Co-operative Production and Sale Society. Washermanpet, Madras.
101. Rajam Weavers' Co-operative Society.
102. Bobbili Weavers' Co-operative Society.
103. Bonthalakoduru Weavers' Co-operative Society.
104. Kovvur Handloom Weavers' Co-operative Society.
105. Bhimavaram Handloom Weavers' Co-operative Society.
106. Narsapur Weavers' Co-operative Purchase and Sale Society.
107. Papanaidupeta Weavers' Co-operative Society.
108. Maddur Weavers' Co-operative Society.
109. Kolathur Weavers' Co-operative Sale Society.
110. Sathravada Weavers' Co-operative Sale Society.
111. Puthur Weavers' Co-operative Sale Society.
112. Narayanavaram Weavers' Co-operative Sale Society.
113. Kuppam Seamless quilt Weavers' Sale Society.
114. Buchireddipalem Weavers' Co-operative Society.
115. Kumaracha Handloom Weavers' Co-operative Society
116. The Calicut Weavers, Co-operative Sale Society.
117. Ramanattukara Weavers' Co-operative Society.
118. Tanur Weavers' Co-operative Society.
119. Tiruvegapura Weavers' Co-operative Sale Society.
120. Madura Handloom Weavers' Co-operative Society.
121. Melapalayam Weavers' Co-operative Society.
122. Jalakantapuram Weavers' Co-operative Sale Society.
123. Tiruchengode Weavers' Co-operative Sale Society.
124. Ballurpet Paupparapalli Weavers' Co-operative Society.
125. Vanavasi Weavers' Co-operative Society.
126. Annasagaram Weavers' Co-operative Society.
127. Salem Weavers' Co-operative Society.
128. Veppampoondi Weavers' Co-operative Society.
129. Ammapet Weavers' Co-operative Society.
130. Rasipuram Weavers' Co-operative Society.

(c) Weavers' Co-operative Societies—*concld.*

MADRAS—*concld.*

131. Namakkal Weavers' Co-operative Society.
132. Ambasamudram Weavers' Co-operative Society.
133. Kallidaikurchi Weavers' Co-operative Society.
134. Tenkasi Weavers' Co-operative Society.
135. Aruppukottai Weavers' Co-operative Society.
136. Puliampatti Weavers' Co-operative Society.
137. Ayakudi Weavers' Co-operative Sale Society.
138. Parameswaram Weavers' Co-operative Purchase and Sale Society.
139. Vadugapatti and Sedapatti Weavers' Co-operative Sale Society.
140. Chinnalpatti Weavers' Co-operative Society.
141. Maniyar Weavers' Co-operative Sale Society.
142. Pantalayam Weavers' Co-operative Sale Society.
143. The Guntur District Handloom Weavers and the Guntur District Weavers' Co-operative Societies.
144. Bhavani Weavers' Co-operative Society, Coimabtore.
145. The Madras Handloom Weavers' Provincial Co-operative Society.
146. Chimakurthi Weavers' Co-operative Society.
147. Tenali Weavers' Co-operative Society.
148. Chirala Weavers' Co-operative Society.
149. Elapally Weavers' Co-operative Society.
150. Palamkottah Sourashtra Weavers' Purchase and Sale Society.

BOMBAY.

151. The Bijapur Industrial Co-operative Association, Bagalkot.
152. The Industrial Co-operative Association, Yeola.
153. The Industrial Co-operative Association, Belgaum.
154. The Khandesh Dist[illegible]ndustrial Co-operative Association, Dhulia.

BENGAL.

155. Bengal Provincial Co-operative and Industrial Society.

(d) Weavers' Associations.

MADRAS.

156. Handloom Weavers' Association, Salem.
157. Thogamalai Weavers' Society.
158. The Guntur Weavers' Society.
159. Tanguturu Adi-Andhra Spinners' and Weavers' Society.
160. Sourashtra Sabha, Madura.

MYSORE.

161. The Mysore State Handloom Weavers' Association, Bangalore.

BENGAL.

162. All-Bengal Weavers' Association, Calcutta.

BOMBAY.

163. The Bombay Presidency Handloom Weavers' Association, Poona.
164. The Karnatak Weavers' Association, Bagalkot.

CENTRAL PROVINCES & BERAR.

165. Koshti Hitakarini Mandal, Nagpur.

(e) Other Associations.

MADRAS.

166. Vallibs Sangam, Potharakkan Villai.
167. Artificial Silk Weaving Industry, Onnupuram.
168. The Madras Yarn Merchants' Association, Madras.
169. The South Indian Senguntha Mahajan Sangha, Madras.

BENGAL.

170. All India Spinners' Association, Bengal Branch.
171. The Calcutta Yarn Merchants' Association, Calcutta.
172. All Bengal Jamiatul Momenin.
173. Silpa Bhavana, Sriniketan, Bolpur.
174. The Marwari Association, Calcutta.

BOMBAY.

175. East India Cotton Association, Bombay.
176. Handloom Industrialists' Association, Banhatti.

CENTRAL PROVINCES AND BERAR.

177. The Burhanpur Electric Supply and Training Co., Burhanpur.

SIND.

178. The Buyers and Shippers Chamber, Karachi.

PUNJAB.

179. Textile Manufacturers' Association, Amritsar.

BIHAR.

180. Bihar Sub-divisional Jamiatul Momenin, Bihar Sharif.

(f) Individuals.

MADRAS.

181. Mr. C. Nataraja Mudaliar, Madras.
182. Mr. W. Subbarayudu, Kurnool.
183. Mr. U. P. Venkatraju, Rajahmundry.
184. Mr. K. Nagendrudu, Ongole.
185. The Sub-Collector, Dindigul.
186. The Collector, Guntur.
187. The Revenue Divisional Officer, Melur.
188. The Collector of Kistna.
189. The Tahsildar, Cocanada.
190. The Tahsildar, Ramachandrapur.
191. The Tahsildar, Razole.
192. The Tahsildar, Amalapuram.
193. The Tahsildar, Peddapuram.
194. The Tahsildar, Rajahmundry.
195. The Deputy Tahsildar, Pittapur.
196. The Deputy Tahsildar, Tuni.
197. Deputy Registrar, Calicut.
198. Deputy Registrar, Trichinopoly.
199. Deputy Registrar, Chittoor.
200. Deputy Registrar, Guntur.
201. Deputy Registrar, Vizagapatam
202. Deputy Registrar, East Godavari.

(*f*) Individuals—*contd.*

MADRAS—*contd.*

203. Deputy Registrar, Madura.
204. Deputy Registrar, Mangalore.
205. Deputy Registrar, Tanjore.
206. Deputy Registrar, Tinnevelly.
207. Deputy Registrar, South Arcot.
208. Deputy Registrar, Coimbatore.
209. Deputy Registrar, Chingleput.
210. Deputy Registrar, Anantapur.
211. Deputy Registrar, Cuddapah.
212. Deputy Registrar, Bezwada.
213. Deputy Registrar, Vellore.
214. Assistant Registrar, Ellore.
215. Assistant Registrar, Nellore.
216. Assistant Registrar, Kurnool.
217. Assistant Registrar, Bellary.
218. The Collector, East Godavari.
219. The Collector, Salem.
220. The Collector, Tanjore.
221. Rev. H. A. Popley, Erode.
222. Mr. M. S. Venkaba Sa, Kanetpuram.
223. Mr. Kishinchand Chellaram, Madras.
224. Rao Bahadur C. M. Ramachandra Chettiar, Madras.
225. The Collector, Coimbatore.
226. The Collector, Malabar.
227. Messrs. Brunnschweiler and Co., Madras.
228. Dr. P. S. Lokanathan, Madras.
229. Mr. K. C. Ramakrishnan, Madras.
230. Dr. A. Krishnaswami, Madras.
231. Dr. B. V. Narayanaswami Naidu, Annamalainagar.
232. Mr. N. S. Sundararama Sastri, Madras.
233. T. Satyanarayana Rao, Waltair.
234. Mr. Ch. Sitarama Sastri, Waltair.
235. Professor (Sri) M. Lakshmi Ammal, Queen Mary's College, Madras

ORISSA.

236. Mr. A. Suryanarayana Murti, Berhampur.

BENGAL.

237. President, Rajbalhat Union Board.
238. Sub-Divisional Officer, Jangipore.
239. The Collector, Bankura.
240. The Collector, Pabna.
241. The Collector, Chittagong.
242. The Collector, Hooghly.
243. The Collector, Dacca.
244. The Collector, Howrah.
245. Mr. A. P. Choudhury, Calcutta.
246. Sub-Divisional Officer, Madaripur.
247. Sub-Divisional Officer, Serampore.
248. Sub-Divisional Officer, Gopalganj.
249. The District Magistrate, Nadia.

(f) Individuals—*contd.*

BENGAL—*contd.*

250. The District Magistrate, Tippera.
251. The Collector, Malda.
252. The Collector, Birbhum.
253. Managing Director, Nath Bank, Calcutta.
254. Additional Collector, 24-Parganas.
255. The Collector, Burdwan.
256. Professor J. C. Sinha, Calcutta.
257. Dr. H. L. Dey, Dacca.
258. Dr. Sudhir Sen, Viswa Bharati Economic Research, Bolepur.
259. Mr. L. M. Mukherji, Secretary, Hosiery Manufacturers' Association, Calcutta.
260. Mr. Ganeshdass Bahl, Calcutta.

BOMBAY.

261. Mr. S. A. Vantagudi, Rabkavi.
262. Professor C. N. Vakil, Bombay.
263. Dr. V. K. R. V. Rao, Ahmedabad.
264. Assistant Registrar of Co-operative Societies, Poona.
265. The Mamlatdar, Yeola.
266. The Mamlatdar, Malegaon.
267. The Mamlatdar, Chorasi.
268. The Mamlatdar, Olpad.
269. The Mamlatdar, Jalalpur.
270. The Mamlatdar, Bardoli.
271. The Mamlatdar, Pardi Mahal.
272. The Mamlatdar, Mandir.
273. The Mamlatdar, Valod Mahal.
274. The Collector, Poona.
275. The Collector, Surat.
276. The Collector, Belgaum.
277. Mr. Manu Subedar, M. L. A.
278. Rao Bahadur C. K. Chitale, Ahmednagar.
279. Rao Sahib M. S. Sinhasan, Bijapur.
280. Mr. Gulsarilal Nanda, M. L. A., Ahmedabad.
281. Mr. Kakade, Poona.
282. Mrs. Lilavati Munshi, Bombay.
283. Mrs. D. N. Siruri President, Seva Sadan, Gandevi, Bombay.
284. Mrs. Sabibai Moolji Dayal, Hony. Secretary, Bhatia Stree Mandal, Bombay.
285. Mr. S. L. Dikonda, President, All-India Padmashalee Conference, Ahmednagar.

CENTRAL PROVINCES AND BERAR.

286. Deputy Commissioner, Bilaspur.
287. Deputy Commissioner, Nagpur.

BIHAR.

288. Deputy Collector, Patna.
289. The Collector, Bhagalpur.
290. The Collector, Muzaffarpur.
291. District Magistrate, Gaya.
292. Weaving Supervisor, Department of Industries, Ranchi.
293. Mr. S. N. Mazumdar, I. C. S., Ranchi.
294. Rao Bahadur K. S. Rao, Patna.
295. Dr. Gyan Chand, Patna.

(*f*) Individuals—*concld.*

UNITED PROVINCES.

296. Principal, Central Weaving Institute, Benares.
297. Textile Expert, U. P. Government, Cawnpore.
298. The Deputy Commissioner, Barabanki.
299. The Deputy Commissioner, Lucknow.
300. The District Magistrate, Meerut.
301. The District Magistrate, Gorakhpur.
302. Inspector of Co-operative Societies, Barabanki.
303. The Collector, Benares.
304. The Deputy Commissioner, Sitapur.
305. Professor Radhakamal Mukherji, Lucknow.
306. Professor S. P. Saksena, Lucknow.

SIND.

307. The Superintendent of Census Operation, Sind.

PUNJAB.

308. Mr. P. N. Chopra, Lahore.
309. Deputy Commissioner, Amritsar.

TRAVANCORE.

310. Mr. V. Lakshmanan, Trivandrum.
311. Mr. E. I. Chacko, President, Srimulam Shastyabdapurthy Memorial Technical Institute Co-operative Weavers' Society, Trivandrum.

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APPENDIX IV.

List of centres visited and persons interviewed.

Date. (1)	Place. (2)	Centres visited or persons interviewed. (3)
7-2-41	Lucknow . .	Discussions with Dr. Panna Lal, C.I.E., I.C.S., Adviser to H. E. the Governor, U. P., Mr. N. C. Mehta, I.C.S., Secretary for Industries, the Director of Industries, Assistant Director of Industries, Assistant Registrar of Co-operative Societies, Principal, Technical School, Cawnpore, Dr. Radhakamal Mukerjee and others. Visited the U. P. Arts and Crafts Emporium.
9-2-41	Patna . . .	Discussions with the Secretary, Development Department, the Director of Industries, the Textile Expert, Mr. Tara Prasanna Ghosh, Managing Director, Ranchi Weavers' Stores and others. Visited Bihar Cottage Industries, Gulzaribagh.
11-2-41	Calcutta . .	Discussions with the Hon'ble Mr. Tamiz-ud-din, Minister in charge of the Industries Dept. Govt. of Bengal, Mr. S. C. Das Gupta, Sodepur and the representatives of Bengal Millowners' Association. Conference with the Secretary to Government (Agriculture and Industries), the Director of Industries, Industrial Intelligence Officer and others.
20-2-41	Nagpur . .	Had discussions with the Adviser to H. E. the Governor (Industries). Conference with the Director of Industries, the Registrar of Co-operative Societies, the Textile Expert, Mr. Batliwala, Managing Director, Empress Mills, Mr. R. B. Kumbarahe, President, Mr. N. L. Belekar, Secretary, Koshti Hithakarini Mandal, Nagpur, and others. Visited the Empress Mills, Koshti Hithakarini Mandal and weavers' quarters.
22-2-41	Hyderabad . .	Conference with Officials, Millowners and others, presided over by Nawab Sir Akil Jung Bahadur, Member for Industries and Commerce. Discussions with the Rt. Hon'ble Sir Akbar Hydari P. C., the Director of Industries and Commerce, Textile Expert and others. Visited the Oosman Shahi Mills.
26-2-41	Madras . . .	Conference with the Secretary, Development Department, the Registrar of Co-operative Societies, Joint Registrar, the Director of Industries and the Textile Expert. Discussions with Dewan Bahadur C. S. Ratnasabapathi Mudaliar, President, Madras Provincial Handloom Weavers' Society. Met representatives of Real Madras Handkerchiefs' Association, and Lungi Merchants' Association. Visited Weavers' quarters in Washermanpet.

APPENDIX IV—*contd.*

List of centres visited and persons interviewed.

Date. (1)	Place. (2)	Centres visited or persons interviewed. (3)
3-3-41	Madura . .	Discussions with Mr. A. S. Lakshmanier, President, Madura Weavers' Co-operative Society, Mr. L. K. Tulsiram, Mr. P. S. A. Krishna Iyer and others.
		Visited Madura Mills and had discussions with Mr. J. M. Doak, Managing Director. Visited Sree Minikshi Mills, weavers' quarters and dyeing factories.
4-3-41 5-3-41	Coimbatore . .	Conference at Collector's office with representatives of weavers from different parts of the district.
		Discussions with Representatives of the Southern India Millowners' Association.
		Visited weavers' quarters, piecegoods market and Spinning Mills.
6-3-41	Salem . . .	Discussions with Salem District Chamber of Commerce and the representatives of Weavers' Co-operative Societies and others.
		Visited Ammapet and other weavers' quarters and the piecegoods market.
7-3-41	Calicut . .	Conference at Collectors' office with representatives of Mills and Handloom factories.
		Visited Kannancheri Theruvu, the handloom factories of the Commonwealth Trust Ltd., and St. Vincent Industries.
8-3-41 10-3-41	Cannanore . .	Conference with representatives of the Textile Manufacturers' Association.
		Visited Aaron Spinning and Weaving Mills, Thunoli Mills, the handloom and powerloom factories of the Commonwealth Trust Ltd., and the Hosiery Factory of the Commercial Textile Corporation.
11-3-41 12-3-41	Bangalore . .	Conference with the Director of Industries and representatives of handloom weavers.
		Discussions with Mysore Chamber of Commerce, Bangalore.
		Visited Jamgamkota and Dodballapur.
13-3-41	Dharmavaram .	Discussions with weavers' representatives and cloth merchants.
19-3-41 25-3-41	Bombay .	Conference with the representatives of the Bombay Millowners' Association. Discussions with Mr. H. F. Knight, Adviser to H. E. the Governor, the Director of Industries, representatives of the handloom weavers from Dhulia, Belgaum and Malegaon and others. Visited Government Sales Depot, Mills and weavers' quarters, handlooms and powerloom factories at Bhiwandi.

APPENDIX IV—*contd.*

List of centres visited and persons interviewed.

Date. (1)	Place. (2)	Centres visited or persons interviewed. (3)
26-3-41	Surat . . .	Conference with Rao Bahadur I. J. Shastri, and other representatives of the Surat Chamber of Commerce.
		Visited handloom and powerloom weaving quarters, gold thread manufacturing centres, piecegoods market, etc.
28-3-41 29-3-41	Ahmedabad . .	Conference with Ahmedabad Millowners' Association.
		Discussions with Mr. Ambalal Sarabhai, Mr. Kasturbhai Lalbhai and others.
		Discussions at the Industrial Co-operative Association.
4-4-41	Delhi . . .	Visited Delhi Cloth Mills.
9-4-41	Amritsar . .	Discussions with representatives of the Textile Manufacturers' Association, Amritsar.
		Visited handloom and powerloom factories, the Government Emporium and Tarsika, a weavers' village.
12-4-41	Lahore . . .	Discussions with the Hon'ble Sir Sikandar Hayat Khan, the Hon'ble Sir Manohar Lal, the Director of Industries, the Registrar of Co-operative Societies and others.
15-4-41	Multan . .	Weaving centres.
		SECOND TOUR.
25-5-41	Cannanore . .	Conference with the Textile Manufacturers' Association.
		Discussions with Mr. Samuel Aaron and others.
27-5-41	Tellicherry . .	Visited Kottayam Taluk Weavers' Co-operative Society.
28-5-41	Trichur (Cochin State).	Visited Siteram Mills Ltd., and Cochin Textiles Ltd., Kuthanpilly, a weaving centre. Discussions with Sir R. K. Shanmukham Chetty (Dewan) and the Director of Industries, Cochin State.
29-5-41	Alwaye . . .	Visited the Sri Chittra Mills (E. D. Sassoon Ltd.), handloom factories at Athirampuzha and the Industrial School at Kozhuvanal.
31-5-41	Trivandrum . .	Discussions with Sir C. P. Ramaswami Iyer, Dewan of Travancore, the Chief Secretary to Government, the Director of Industries, the Principal of the Central Technological Institute and Mr. E. I. Chacko.
		Visited Sri M. S. M. Institute and Central Weavers' Co-operative Society and attended Conference with the Executive Committee. Visited Sri Krishnaraj Weaving Factory and the Hindu Mission Weaving School.
2-6-41	Balaramapuram .	Visited Balaramapuram, Amaravilla, and Palliady; Embroidery School at the Mulakumudu Convent; Mr. Elangath's Weaving and Rural Reconstruction Centre, Eraniel; Neyyoor Weaving Institute, Neyyoor; Marthandam Rural Reconstruction Centre.

APPENDIX IV—*contd.*

List of centres visited and persons interviewed.

Date. (1)	Place. (2)	Centres visited or persons interviewed. (3)
3-6-41	Nagercoil . .	Conference with representatives of weavers at Municipal Office.
		Visited the weavers' quarters in Vatassari, Kottar and Edalakudi, S. M. R. V. Technical Institute.
4-6-41	Tinnevelly . .	Discussions with Rao Bahadur M. D. T. Kumaraswamy Mudaliar, the Deputy Director of Co-operation, Subbiah Mudaliar, Dharamalinga Mudaliar, Gulam Sahib and others.
		Visited weavers' quarters at Palamcottah, Kalladakurichi, Malapalayam, Veeravanalloor, and held discussions at the offices of the weavers' co-operative societies.
6-6-41	Madura . .	Discussions with Sourashtra Weavers' Co-operative Society, the Deputy Registrar of Co-operative Societies and others.
8-6-41	Uppada . .	Visited weavers' quarters and discussions with weavers at the Co-operative Society.
9-6-41	Vizagapatam .	Discussions with the Deputy Registrar of Co-operative Societies and representatives of weavers from neighbouring areas.
10-6-41 11-6-41	Cuttack . .	Discussions with the Director of Development, the Textile Expert, the Assistant Registrar of Co-operative Societies, Mr. A. P. Choudhury (Secretary, All-India Spinners' Association, Bengal Branch), A. S. N. Murti (Secretary, Millowners' Association), Rai Bahadur Bhikaryeheran Patnaik V. R. Rama Rao (Secretary, Berhanpur Chamber of Commerce).
		Visited Weavers' Co-operative Societies, Nawabpatna and Raushpatna weaving centres.
19-6-41	Bankura . .	Visited Bankura District Co-operative Industrial Union and held discussions with the Principal C. F. Ball, Secretary, Professor J. C. Banerjee, Joint Secretary, Babu Mohanlal Gupta, cloth merchants, and others, visited weavers' quarters.
20-6-41	Bishnupur . .	Discussions with the representatives of weavers and visited weavers' quarters.
22-6-41	Autpur . .	Discussions with the representatives of weavers at Bishnupur, Autpur and Rajbalhat.
24-6-41	Gauhati .	Visited Soalkuchi, Rampur, and Pallasbari.
		Visited Endi Weaving at Rampur.
		Visited the Government Weaving Institute.
26-6-41	Pabna . . .	Conference with the representatives of Hosiery Manufacturers. Visited the Weaving School and Hosiery Works.

APPENDIX IV—*contd.*

List of centres visited and persons interviewed.

Date. (1)	Place. (2)	Centres visited or persons interviewed. (3)
27-6-41	Narayanganj . .	Visited the Dhakeshwari Mills, Kachpur, Demra and Shivaramapore, and other handloom centres.
28-6-41	Dacca . . .	Visited the weavers' quarters and Government Weaving School.
30-6-41	Narasinghdi .	Discussions with Mr. Surdar Khan, the Sub-divisional Officer. Visited Madhobdi village and Babur Hat.
1-7-41	Comilla . .	Visited Barkhamta and Mainamati Hat.
2-7-41	Bhagyakul . .	Visited Narisa village and Malikandi Abhoya Ashram Spinning centre.
3-7-41	Santipur . .	Discussions with Mr. Mohamed Menu Mandal (Municipal Commissioner) Mr. Afzal Huq, Chairman of Municipality and Rai Bahadur Gopal Chandra Ganguly. Visited karkhanas and weavers' quarters.
7-7-41	Calcutta . .	Discussions with the Director of Industrries, Mr. A. P. Choudhury, Mr. Sukumar Datta, M. L. A. and others. Visited Bengal Provincial Government Weavers' Societies Emporium and Kamalalaya Stores.
8-7-41	Ranchi . . .	Discussions with Mr. S. M. Dhar, I. C. S. (Secretary to Government), the Director of Industries, the Textile Expert, and Mr. S. N. Mozumdar, I. C. S. Visited Irba, a weaving village and the Ranchi Handloom Cloth Stores.
10-7-41	Gaya . . .	Visited the Government Wool Emporium and the Weavers' cottages in Manpur, Bihar Sharif and had discussions at the Co-operative Society with Mr. Safar Ahmed, M.L.A. and other.
11-7-41	Benares . .	Visited Government Weaving Institute and Weavers' quarters in and around Benares, and cloth market.
13-7-41	Mau . . .	Visited Government Handloom Emporium and had discussions with the representatives of weavers and visited weavers' quarters.
14-7-41	Lucknow . .	Visited Barabanki, Industrial Corporation's emporium and weavers' quarters. Discussions with the Director of Industries and the Assistant Director of Industries, and Assistant Registrar of Co-operative Societies at the Lucknow Arts and Crafts Emporium.
15-7-41	Cawnpore . .	Conference with representatives of Upper India Chamber of Commerce and U. P. Merchants' Chamber. Visited Mills and Government Technical Institute.
17-7-41	Aurangabad .	Visited Aurangabad Industrial Emporium, Basar Silk Factory and other handloom factories.
18-7-41	Paithan . .	Visited the Government Weaving Institute and weavers' quarters.

APPENDIX IV—*contd.*

List of places centres visited and persons interviewed.

Date. (1)	Place. (2)	Centres visited or persons interviewed. (3)
20-7-41	Malegaon . .	Conference with Khan Bahadur Abdul Rashid Hakim and others and representatives of handloom and power-loom weavers.
		Visited Malegaon Industrial Association and the cloth market.
24-7-41	Poona . . .	Visited Government hand-weaving Institute and weavers' quarters
		Discussions with Professor V. G. Kale and Mr. D. R. Gadgil.
28-7-41	Sholapur . .	Conference with the representatives of Industrial Co-operative Association.
		Discussions with the representatives of weavers.
		Visited Tickekarwadi Textile Mills, Ltd.
29-7-41	Bagalkot . .	Visited Ilkal, Guladgad and Kamatgi and had discussions with Rao Sahib Sinhasan and other representatives of weavers.
30-7-41	Hubli . . .	Visited the District Weavers' Association.
31-7-41	Belgaum . .	Conference with Mr. P. Chikodi and other representatives of weavers in the Municipal Hall.
		Visited Shahpur and the District Industrial Co-operative Association, Belgaum.
1-8-41	Banhatti (Jamkandi State).	Discussions with weaver.
	Rabkavi . .	Discussions with weavers.
	Mahalingpur (Modhol State).	Conference with representatives of weavers.
3-8-41	Gadag-Betigeri .	Conference with Mr. Bharadwaj and representatives of weavers at the Municipal Hall.
5-8-41	Bangalore . .	Conference with Mr. A. V. Ramanathan (Minister), the Secretary for Development, the Director of Industries and representatives of handloom weavers.
7-8-41	Coimbatore . .	Visited Tiruppur, Chennimalai and Oondiputhur.
		Conference with Members of the Southern India Mill-owners' Association.
10-8-41	Erode . . .	Visited Chittode, Bhavani, and the handloom establishment of Mr. Kuppuswami Mudaliar.
		Discussions with Mr. and Mrs. H. A. Popley.
11-8-41	Salem . . .	Conference with the representatives of handloom weavers from all over the District.

APPENDIX IV—*contd.*

List of places centres visited and persons interviewed.

Date. (1)	Place. (2)	Centres visited or persons interviewed. (3)
		Discussions with Mr. S. C. Venkatappa Chettiar, M.L.A., and representatives of cloth merchants.
		Visited Ammapet, Paparapatty and Tiruchengode.
12-8-41	Rasipuram . .	Visited Handloom weavers' Co-operative Society and had discussions with the representatives of weavers.
23-8-41	Conjeevaram . .	Conference with representatives of weavers at the Municipal Hall.
25-8-41	Arni . . .	Visited Lungi and Sarong weavers' quarters.
30-8-41	Chirala . .	Visited weavers' quarters in Perala and Chirala Nidubrolu Weavers' Co-operative Society.
31-8-41	Mangalagiri . .	Conference with Mr. D. Ramakanta Rao and other representatives of weavers.
1-9-41	Masulipatam . .	Visited Pedana, and had discussions with the representatives of Pedana Weavers' Co-operative Society, and Weavers' Co-operative Society of Masulipatam.
		Had discussions with Mr. Narayana Murti, Secretary, A.I.S.A., Andhra Branch.
		Inspected the Kalamkari technical methods.
6-9-41	Madras . .	Had discussions with—
12-9-41		Sir G. T. Boag, K.C.I. E. and Mr. H. M. Hood, C.I.E., Advisors to H. E. the Governor, Mr. S. V. Ramamurti, I.C.S., Chief Secretary, Rao Bahadur C. P. K. Menon, Secretary of Development, the Registrar of Co-operative Societies, the Director of Industries, Dewan Bahadur C. S. Ratnasabapathy Mudaliar, Mr. J. M. Doak (Madura Mills), Mr. Arunachala Mudaliar, Rao Sahib C. M. Ramachandran Chettiar, Mr. P. V. Krishniah Chowdhury, Mr. C. Nataraja Mudaliar, Secretary, South Indian Sengunthan Mahajana Sabha, Mr. S. Kalappa Mudaliar and Mr. K. Suryaprakash Rao.
		Conferences with the representatives of the Southern India Chamber of Commerce and representatives of Messrs. Binny & Co. (Mr. J. Nuttall and Mr. R. E. Castel).
		Had discussions with the representatives of Madras piecegoods merchants.
		Conference with representatives of the Madras Economic Association (Dr. P. S. Lokanathan, Dr. A Kirshnaswami and Mr. N. S. R. Sastry).
18-9-41	Guntakal . .	Discussions with the President, Handloom Weavers' Association, Yemmiganur.
19-9-41	Kolhapur . .	Visited Mills and handloom centres, and powerloom factories at Ichalkaranji.

APPENDIX IV—*contd.*

List of places centres visited and persons interviewed.

Date. (1)	Place. (2)	Centres visited or persons interviewed. (3)
20-9-41	Sangli . .	Conference with representatives of mills and handloom weavers.
22-9-41	Bombay . .	Conference with representatives of Millowners' Association, Bombay.
		Discussions with Sir Purushottamdas Thakurdas (President, East India Cotton Association), the Director of Industries, Mr. Sankalchand G. Shah (President and yarn merchant, Silk Association).
25-9-41	Ahmedabad . .	Conference with the Ahmedabad Millowners' Association.
		Discussions with the weavers from Dholka, Nadiad Malmadabad.
		Visited the Industrial Co-operative Association.
27-9-41	Baroda . .	Visited the Cottage Industries Institute, the Kalabhavan, the Calico printing factories, the weavers' quarters.
		Discussions with Sir. V. T. Krishnamachari (Dewan), the Director of Industries, and the Officer in charge of cottage industries.
30-9-41	Burhanpur . .	Visited a powerloom factory and handloom centres. Visited the Burhanpur Electric Supply Co., and had discussions with Mr. Pugalia, Manager.
		Conference with representatives of handloom and powerloom interests at the Town Hall.
2-10-41	Nagpur . .	Conference with representatives of the Empress Mills, the Secretary of the Koshti Mandal, and representatives of Madhya Prant and Verhat Vinkar Parishad. Visited weaver's quarters at Umred and cloth market.
4-10-41	Bilaspur . .	Discussions with the Deputy Commissioner. Visited cloth market.
13-10-41	Calcutta . .	Visited handloom weavers' cottages at Begumpur.
15-10-41	Sohagpur . .	Visited the Hat and weavers' quarters, and had discussions with representatives of weavers.
17-10-41	Tangail . .	Visited Mymensingh Central Co-operative Society, Puthiagani Hat (weavers' quarters) at Bajitpur Gharinda and other places.
31-10-41	Calcutta . .	Visited the Women's Co-operative Industrial Home, Dum Dum and had discussions with Lady Abala Bose.
2-11-41	Bagerhat . .	Visited Bagerhat Co-operative Weaving Union, Ltd., and had discussions with Mr. Ukiluddin Khandakar and Mr. S. N. Ghosh, Chairman, District Board.

APPENDIX IV—*concld*

List of places centres visited and persons interviewed.

Date. (1)	Place. (2)	Centres visited or persons interviewed. (3)
5-11-41	Panchkura . .	Visited Radhamani Hat at Tamluk.
		Discussions with Mr. I. A. Ali, I.C.S.
6-11-41	Mahisadal . .	Conference with the representatives of weavers and Mr. U. N. Banerjee, Manager, Mahisadal Estate.
11-11-41	Chaumuhani . .	Visited the hat and the Nath Samity and had discussions with the representatives of weavers.
12-11-41	Chittagong . .	Visited the weavers' quarters and had discussions with weavers' representatives.
		Discussions with Mr. Abdul Khadir, Khan Bahadur Fazlul Khadir and others.
25-11-41	Calcutta . .	Visited the Howrah Hat.
13-12-41		Discussions with the Secretary for Industries Mr P. G. Sen, Assistant Registrar and other officers of the Industries and Co-operative Departments, Mr. L. M. Mukherjee (Vice-President, Bengal Hosiery Manufacturers' Association), Professor J. C. Banerjee Bankura, Khan Bahadur Fazlul Khadir, M.L.A.
2-2-42	Poona . . .	Discussions with Mr. Sayanna Dikonda (Ahmednagar), the Registrar of Co-operative Societies, and Inspector of Weavers' Co-operative Societies.

APPENDIX V.

Information regarding handloom surveys and enquiries conducted in various Provinces and States during recent years.

Assam.—In Assam, a survey of handloom weaving was conducted along with the census operations in 1921. A similar and possibly more detailed survey was made along with the 1941 census and although the data have not been tabulated, some of the results were placed in our hands. A departmental survey of a detailed character in selected areas was also undertaken lately.

Bengal.—In Bengal, a detailed survey of cottage industries was made by the Department of Industries in 1924 and included handloom weaving along with other small-scale industries. In 1936, the Bengal Board of Economic Enquiry conducted a sample survey of hand-weaving centres with the help of the technical staff of the Co-operative Department. In 1941, a more detailed survey of cotton hand-weaving of the entire Province was carried out under the auspices of the Bengal Industrial Survey Committee by Mr. D. N. Ghose, Industrial Intelligence Officer of the Department of Industries. This was both an extensive and an intensive survey; while trained investigators collected detailed facts from a few selected centres, information about the whole Province was gathered through the Presidents of Union Boards. 4,350 copies of the questionnaire were issued and 1,789 replies were received.

Madras.—In Madras, the Board of Revenue maintained statistics of looms and weavers even a hundred years ago. An extensive survey of cottage industries was conducted by the Government in 1928-29 with the help of a special officer, Mr. D. Narayana Rao. Reports of this survey for each district were published separately, and finally a comprehensive report was issued. In 1934-35, statistics relating to the number of looms were collected by the Revenue Department at the instance of the Department of Industries and Commerce. In 1938, the staff of the Department of Co-operation undertook a survey of the hand-weaving industry on the basis of a questionnaire prepared by the Director of Industries and Commerce, and a report of this was published in 1939. In 1940-41, the Co-operative Department again made a special survey of 102 important weaving centres as also a general survey of hand-weaving in the whole Province.

Bombay.—A comprehensive survey of the handloom industry in Bombay was carried out in 1928 by the Department of Industries through its Weaving Assistant, Mr. Telang and the results were published in the form of a bulletin. Hand-weaving was also included in a report on Arts and Crafts by Mr. J. P. Fernandes, published in 1930. Since Mr. Telang's survey, the peripatetic weaving staff of the Department of Industries have been keeping the statistics of looms and weavers up-to-date. Handloom weaving also formed part of the extensive survey conducted by the Bombay Economic and Industrial Survey Committee, whose report was published in 1940. This Committee worked with the help of investigators and had also the assistance of the District Officers' staff.

Central Provinces.—Enquiries into handloom weaving in the Central Provinces began in 1908 with Mr. C. E. Low's general survey of industries. In 1935, a special investigation of handloom weaving was conducted in all districts of the Province on a village to village basis. In 1938, an industrial survey of the Province was carried out by a Government Committee presided over by Mr. J. C. Kumarappa. Lately the staff of the Industries Department conducted a survey of important weaving centres in the Province. It is worthy of special mention that this is the only Province in British India which tabulated the occupational tables of the 1941 census with a view to finding out how handloom weaving has fared since 1931.

Bihar.—In Bihar, a census of looms was made in 1921 along with the decennial census. Later in 1935, the number of fly-shuttle looms was counted up. In 1941, a detailed survey was undertaken by the Department of Industries with the help of its district staff.

United Provinces.—In the United Provinces, an elaborate survey of the hand-weaving industry was carried out in 1935 by two special investigators working under the Director of Industries.

Punjab.—In 1926-27, the Department of Industries of the Punjab, conducted a survey of the textile industry in the Province through its Textile Inspector, Mr. Mul Raj, and this was published in the form of a bulletin in 1929. Lately under the Industrial Survey Scheme, a comprehensive survey has been carried out and the results have been utilized in filling the tables supplied by the Director of Industries to this Committee.

The States.—Similarly the leading States have also undertaken surveys. Hyderabad had a survey ten years ago and the report was published. In connection with the 1931 census, the number of handlooms and weavers was counted. A more comprehensive survey was made by the Textile Expert in 1937. In Mysore a survey was lately carried out by the Department of Industries and the results were made available to the Committee. Baroda conducted sample surveys in three centres and reports were published. In Travancore a special survey was conducted in 1940 and the results were utilized in drawing up the replies to the questionnaire. The hand-weaving of Cochin was surveyed in 1935-36.

APPENDIX VI.

A select glossary of terms relating to hand-made cotton fabrics.

Abrawan.—A slightly inferior quality of Muslin the production of which, once a thriving industry in Dacca, is now practically extinct. The fabric owes its name (lit. "running water") to its texture which is believed to have been so fine as to render the material invisible, if immersed in flowing water. See also *Sangati*, *Shalnam*.

Alwan.—Wrapper or chaddar.

Anarasi Sari.—A fine cotton and silk fabric made at Tangail in Bengal.

Anchal.—The end piece of a sari ornamented with coloured silk or cotton yarn.

Andras.—A fine cloth of close texture.

Angarkha, Ungurkha, Angrakha, etc.—A short calico vest with sleeves resembling the *Angra* which descends only to the haunches, instead of being fastened on both sides, it is tied on one side only, *viz.*, on the right by the Hindus, and on the left by the Mahomedan. This name is also used for a long-skirted gown with long sleeves and closed or covered breasts.

Angavastram.—Fine type of upper cloth.

Angochha.—A towel of light texture.

Anguchia.—Towel.

Arekhal.—See *Muri*.

Asan.—A pileless cotton prayer mat.

Ashni.—A small square carpet or *Dari*.

Athar.—A coarse cloth made in pieces of 30 yards by 12 inches. It is used for spreading on country carts intended for the conveyance of grains. It is also used as a floor-covering.

Athua.—Mosquito net.

Bafta.—1, (in the United Provinces).—These are lower grades of "Kimkhwab"—(silk brocades) with raw silk warp and cotton weft in which the figures are produced from silk instead of gold thread.

2. The term also denotes a cloth made from cotton mixed with silk. It is manufactured in *Bauleura*, *Dacca* and *Bhagalpur*.

Bali.—A silk-bordered white lugada, more generally known as Patal, which is worn by women in the Central Provinces.

Begum Behar Sari.—A beautiful check sari of cotton and silk manufactured at Tangail in Bengal.

Bhagalpuri.—A cloth similar to long cloth, woven on handloom from machine-spun yarn.

Bhagwa.—A small waist cloth worn between the legs and tied round the waist.

Binni Cloth.—A kind of cloth made from cotton of a natural brown colour. Made in the Chittagong district of Bengal.

Boota.—A figured cloth with spots either printed or woven with extra warp or weft.

Chaddar.—Used as a bed sheet or as a wrapper made from single yarn with plain, twill, diamond and honey-comb weaves.

Chanduka.—Very similar to *Garha* or *Gazi* (q.v.) but very much thicker. Woven in pieces of 7 yards by 32 to 33 inches, one piece weighing about 3 lbs.

Chandni.—Cloth used for ceilings.

Charkhana.—Any checked cloth, whether from single or folded cotton, silk, art silk or woollen yarn. Generally used for ladies' garments.

Chheent.—Printed cotton cloth.

Chikan Work.—A form of embroidery done with white thread on a white washing fabric. The fabrics commonly used for the purpose are *Muslin*, *Malmal* and *Nainsook*.

Chofata.—24"/2."×3 yards, used as wrapper.

Chupkan.—A long-skirted gown a male garment resembling the *Ungurkha*

Chutki.—The design is knotted in the warp and weft and then dyed.

Dabba Khes.—A variety of *Khes* (q.v.) also known as *Majnu* or *Multani Khes*. They are made in the Punjab in various colours and geometrical designs on 8 to 16 shafts by skilled weavers on double-cloth principle. The coarse variety is woven from hand-spun and the finer variety from mill-spun yarn. Yarns of colours, from two to four different shades are used, the principal colours employed being grey, blue, yellow and red.

Dosuti or Dosuti—Cloth woven in plain texture with two threads running as one in both warp and weft.

Dharesi.—Same as sari for girls about 4 to 5 yards in length.

Dhotar.—A coarse fabric similar to, but more loosely woven, than Garha or Gazi (q.v.) with 20 end and 20 to 32 picks per inch. May sometimes have a red warp stripe on one side.

Dhoti.—A piece of cloth with a thin border used as loin cloth by men in India. Usually 5 yards long and 44 inches wide.

Dhurries.—Pileless cotton carpets or rugs. The yarns used are hand-spun and are very stout and coarse. Those used in the warp are formed by twisting together, on the spinning wheel, four strands of ordinary, undyed yarn. Those used in the weft are formed by merely winding together the same number of yarns on the "tori" (a long piece of wood on which the weft thread is wound lengthwise and which serves the purpose of the shuttle). Dhurries are manufactured in many designs, colours and sizes particularly in the United Provinces, the Punjab, the Delhi Province, the Madras Presidency, Bihar, the Bombay Presidency and the Bahawalpur State. It is also a popular jail industry in nearly every Province in India.

Dopatta.—A kind of scarf generally worn by women.

Doria.—A cloth with stripes in warp arranged by cramming the ends or by using thicker ends at uniform intervals.

Doridar Dosuti.—A corded check in which the cord is formed by the insertion every quarter of an inch of a thick cord of 10 to 12 strands of yarn both in the warp and in the weft. Used for counterpanes.

Dorya.—A thin fabric of loose texture requiring 40s yarn. Made in the United Provinces.

Duglee, Duglo.—Coat worn by Hindu, Parsee, and Mahomedan males of Western India.

Dupatta.—A kind of scarf worn loosely round the neck or over the shoulders.

Fatka.—Head-dress of men, woven of fine cotton yarn or silk. A piece generally measures 9 yards by 24 inches.

Gamcha, Gamchha or Gamocha.—Coarse cloth of open texture, with or without border, coloured, checked or striped. Ordinarily 5 to 6 feet long, 2 to 2½ feet wide. Used both for cleaning and drying the body.

Garha.—Same as *Gazi* (q.v.).

Gazi.—A coarse, plain fabric manufactured in certain areas in the United Provinces, Bihar, etc. Being a strong thick material as closely woven as the yarn used will permit, it is used largely by the poorer classes, especially in the cold weather, for clothing, shirts, quilts, etc. It is also used as a ceiling cloth. Same as Motia.

Ghati.—A variety of plain cloth, loosely woven from inferior yarn. The width does not usually exceed 22".

Himru.—Brocade with cotton warp and cotton weft with figures, with silk and gold threads.

Ikkat border.—A peculiar red colour with white gomeis (thin arrow like designs) and Bugris (saw) pattern.

Jaguti.—A *Jama* reaching to the knees.

Jali.—A kind of *Chikan work* so called because it looks like a "jal" or a fishing net. It is mostly based on drawn thread work, includes several varieties.

Jamakulam.—A pileless cotton carpet manufactured in parts of Madras Presidency. Dimensions vary but the usual sizes are 6'×3' and 4'×2'. The dyes used are mostly from vegetable ingredients.

Jamdani.—A figured Muslin cloth hand-embroidered in the loom. Manufactured in parts of Bengal, Bihar, Orissa and the United Provinces.

Jharan.—A coarse cloth with borders on all sides, sometimes in check. Used for dusters.

Jora.—The Mahomedan dress suit, comprising—1. The *Dastar* or *Turban*, 2. The *Nimah*, 3. The *Jamah*, 4. The *Kummerbund*, 5. The *Izar*.

Kaba.—Probably same as the Kuba. Described as having very wide sleeves and reaching to the knees. Worn by Mahomedans in place of the *Jama*.

Kaikes.—A class of coloured check goods, made in Madras. They are generally 45 inches in width.

Kamarband.—A piece of cloth tied round the waist.

Kumbayams.—A class of coloured check goods, made in Madras. They are generally 42 inches in width.

Kumblies.—Woollen or cotton blankets.

Kamdani.—A fine cloth ornamented with gold and silver threads. The ground material is a fine *Muslin* generally an *Addhi* and the gilt thread used is of hollow silver wire. A very fine thread is passed through the hollow of the wire and when a sufficiently long piece of wire

has thus been passed on the thread, so much is stitched on to the fabric which is kept stretched horizontally on a frame work. The two processes of work are sometimes combined.

Kapuia.—A piece of cloth, generally known as *Khan*, used for women's "cholis" or bodices.

Katau.—A variety of Chikan work so called from 'Katna', to cut because the fabric is cut away in course of the operation.

Khaddar.—The commonest variety of cloth produced on the handloom in India. It is interwoven in plain order with single warp and weft. In the rural areas it is mostly woven out of hand or charkha-spun yarn.

Khadi.—Same as *Khaddar.*

Khan.—See *Kapata.*

Khandala.—A fancy coloured fabric with solid border and small designs in stripe form, made of cotton, silk and artificial silk. Used for ladies' petticoats or jackets.

Khasida.—Muga and gold thread embroidered scarf.

Khes.—Generally used for bed-sheetings. Made in plain, striped and checked designs with plain, twill, herringbone and diamond weaves from double warp and weft. Is an article of every day use for all classes of people in the Punjab and is therefore woven almost everywhere in that Province. Manufactured in single and double widths in lengths of 12 and 6 yards respectively. Coarse qualities are woven from hand-spun yarn and the finer ones from 10s to 40s mill yarn.

Kholia.—Cotton coarse cloths used for quilts or bags.

Koorta.—This is a loose shirt or under gown worn both by Hindus and Mahomedans.

Kuba.—A long close sort of gown worn by Mahomedans and Hindus. It differs from the *Ungurkha* in being open-breasted, and is worn over the *Mirzaee* or *Koorta.*

Kufcha.—An open jacket, differing from the *Mirzaee* in having tight sleeves.

Kumees.—(from the Arabic word Gumees, a shirt), a kind of muslin formerly manufactured at Dacca, and used for making fine *Koortas.*

Kuppadam.—Solid borders.

Langoti.—Same as *Bhagwa.*

Langhas.—A cotton fabric used for skirts. Generally striped or checked, coloured, seldom white. Produced in the United Provinces.

Logri.—A *sari* used by lower class women in Bihar and Orissa.

Lugdas, Lugdes or Lugadas.—*Saris* worn by women.

Lungi.—(1) A loin cloth generally in check from two to two and a half yards long by 29 to 44" wide woven from ordinary as well as mercerised cotton and sometimes from an admixture of cotton yarn with silk, artificial silk and mercerised cotton yarn.

(2) Also a favourite head-dress with a large class of population in the Punjab as well as the North-West Frontier Province. It is woven in plain white, or in check and "chini" designs mostly on primitive looms from mill-made yarn of 20s to 40s counts. The first two varieties are used by almost all classes, especially among the Hindus, while the latter called "chini" (woven with blue and white ends in alternate order) is preferred by the Mohammedans. The chief districts of production are Hoshiarpur, Jullundur, Ludhiana, Sialkot and Amritsar.

Madras Handkerchiefs.—These so-called handkerchiefs are made of grey and coloured yarns in warp and weft. Their peculiarity is that certain warp yarns are caused to "bleed" during weaving and to tint the grey weft with the colour of the warp, thus producing solid effects in those colours. The yarns employed are usually 60s warp and 40s weft. A piece of cloth of 8 yards in length and 36 inches in width weighs 26 ounces.

Mahmudi.—Very similar to Garha but slightly better in quality.

Majnu Khes.—See *Dabba Khes.*

Malmal.—A generic term for the finest fabrics of Dacca (Bengal).

Mandil.—A long red cloth with a gold border on one side and gold heading used for turbans.

Matka.—Cloth made of hand-spun silk yarn used for *dhotis, saris, chaddars, suitings, shirtings,* etc. Manufactured in the districts of Malda and Murshidabad.

Mekhala.—A piece of cloth with the ends sewn together which is used by women as dress or petticoat (Assam).

Minah and Angga.—The Minah is made of muslin, has sleeves, and is tied across the breast. It descends to below the calf of the leg, and is worn by male Mahomedans in hot weather. The *Angga* is not so long, reaching only to the haunches, and is worn in place of the *Minah.*

Mirani Rasta.—Red and black striped saris.

Mirzaee.—An under jacket with long loose sleeves and open cuffs, worn under the *Kuba.*

Motia.—A coarse cotton cloth woven in parts of Bihar and Orissa on handlooms. Used for wrappers and quilts and also for dhotis, jackets, etc., for men and saris, lungis and bodices for women. Also used as a ceiling cloth, especially for "shamianas".

Muktas, Madipanchama.—Silk dhotis with roiphul (cotton flower designed) border, 44/45″ × 3½/5 yards.

Mundani.—Heading.

Mundu.—A dhoti, 54″ × 2 yards (normally).

Muri.—Raised needle work in *Chikans.*

Mushru.—(1) A fine fabric, in which silk yarn is used in the warp and cotton yarn in the weft (Bombay).

(2) A variety of *Sofi* (q.v.) with black cotton warp of 30s and red cotton weft of 40s (Punjab).

Muslin.—A cotton fabric of exquisite fineness of texture and light weight produced at Dacca in former times. Some idea of the fineness of the cloth may be gathered from the fact that a whole piece, 20 yards long by 1 yard wide, could be passed through the aperture of an ordinary sized finger ring. Tho industry is now practically defunct but an inferior material is produced in some places from fine yarns and marked under this name.

Nakli Daryai.—A fine plain cloth supposed to be in imitation of the true *Daryai* which is of silk. Generally in yellow and light green colour.

Nawar.—A kind of webbing generally manufactured from country yarns, used for cots.

Neryathu.—Same as *Uparna* used by the men in the Malabar coast.

Newar.—See *Nawar.*

Paddar.—Headings.

Pag.—A turban dyed in various colours, 8 to 9 yards long by 1 yard or less.

Pagote.—A coloured *pagri* having both ends ornamented with gold threads.

Pagri.—A piece of cloth tied round the head. See *Lungi* (para. 2).

Paguri.—Same as *Pag.*

Palangposh.—Bed-spread.

Palempore.—Originally derived from the Hindustani "Palangposh" (a bed cover). Now used indiscriminately for Indian printed or hand-printed cotton cloths such as canopies, prayer cloths, mats, handkerchiefs, etc.

Panchas.—Small *Dhotars* (q.v.).

Pasodis.—Sheets.

Patal.—See *Bali.* Also a plain sari (Bombay).

Palka.—A double-bordered turban cloth woven by hand.

Patti.—(1) A variety of carpets produced in the Madras Presidency. These carpets are not of elaborate designs, the patterns consisting of blue and white, blue and red and two shades of blue.

(2) Long strip of cotton or woollen cloth wound spirally round leg from ankle to knee for protection and support.

(3) Also a narrow piece of cloth stitched together breadthwise to make *purdahs* (screens), pedlars' bags or tents. Width 9 to 12 inches. Produced in parts of the Madras Presidency.

Pheta.—A turban.

Pitambar.—Costly dining robe for the use of Hindus both males and females.

Pullos.—Headings.

Purdah.—Curtain or screen cloth.

Renda.—See *Jali.*

Riha.—A cloth worn by women on the upper part of the body.

Roomals.—Handkerchiefs.

Rumal.—A kind of cotton handkerchief, generally of check effect, sometimes used as head-cloth or worn about the neck. Size varies from 18″ to 36″ square. In parts of the Madras Presidency is manufactured a special kind of rumal for use as head-wear, measuring from 80 to 104 inches square and having lace-embroidered borders.

Sadlas.—Coarse saris.

Safas.—Same as *Pugri* cloth.

Salla.—A coarse sari cloth. It is woven with coloured weft, white portions of warp meeting white portions of weft and coloured portions of warp meeting with coloured portions of weft. Yarn used is about 20s counts.

Salu.—Red cloth (Turkey red shade).

Salwa.—Narrow band used as a badge. Term used in Burma.

Sangati.—Literally "for presentation". One of the finest varieties of plain Muslins. See also *Abrawan, Shabnam* and *Sharbati.*

Saree.—Plain or dyed cloth of from 5 to 11 yards a pair in length worn by women in India. They are in various qualities and are sometimes interwoven with silk or artificial silk yarn.

Satranji.—A large-sized cotton floor mat without pile.

Susai.—A specialised fabric made from coloured yarn in Madras. They are largely used by Mohammedan women.

Talia.—Same as *Chutki.*

Tehband.—A loin cloth made on primitive looms in the Punjab and generally used by Mohammedans, both men and women. It is of plain, striped or checked design with solid borders on both sides, and is made from ordinary as well as mercerised cotton. Important centres of production are Amritsar, Multan, Jullundur and Hoshiarpur.

Teni Tope Paddar.—Figured, solid coloured heading.

Tortu, Puncha.—Coarse Napkins.

Tubada.—A wide great coat worn by male Hindus.

Turban.—See *lungi*, para. 2.

Tuwal.—A towel; also called *Anguchia.*

Ulba Joobba.—The Arabian and Persian cloak worn over all other garments. Open in front, and much resembling the English boat-cloak.

Uparni or Uparna.—A garment half the size of a *Dhotar* worn by men over the shoulders.

Vastram.—A fabric of about 40″×1½ yards used as upper cloth.

Veshti.—A dhoti, 45″×7 yards (normally).

Zora. A coarse cotton floor-mat.

APPENDIX VII.

Consumption of Yarn by Hosiery Factories.

Of the different branches of cotton manufacture specified in our computations, hosiery forms a very important branch. It is very difficult, however, to obtain reliable figures regarding the total production of the hosiery industry in India. The industry is scattered all over the country, in British India as well as States, and is both a large-scale and a small-scale industry. The Director General of Commercial Intelligence and Statistics publishes figures for hosiery production in the *Monthly Statistics of Cotton Spinning and Weaving in Indian Mills*. The figures, however, are far from being complete or accurate, as only large factories are required to make returns, and numerous small factories in each Province or State are not accounted for. Thus, in the year 1938-39, the total production of hosiery was represented to be 7·532 million lbs. in weight. We are informed, however, that the Madura Mills alone supplied nearly 8·52 million lbs. of cone yarn to hosiery factories in India. If we take into consideration cone yarn supplied by other mills as well as yarn in bundles as also imported hosiery yarn, we are driven to the conclusion that the official figures are inadequate. It is probable that a large proportion of the gap in statistics is due to the exclusion of small factories, but it is no less probable that the large-scale section of the industry has failed to make accurate returns to the Government.

That the gap is serious can be interred from the following figures supplied by some of the Provincial and State Governments. These figures also are not all complete but refer to the position as it exists in some of the important centres in each case.

Cotton hosiery production (1938-39).

Province or State.	Respective Government's figure (in lbs.).	D. G. C. I.'s figures (in lbs.).
Mysore . . .	139,463	....
Gwalior . . .	232,629	569,856 (Indian States including Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad, Wadhwan, Gwalior, Cambay, Rajkot, Porbandar, Kolhapur, Cochin, Sangli, Ratlam, Travancore, Wankaner, Cutch, Kishangarh, Mewar and French Settlements at Pondicherry.)
Indore . . .	103,000	
Hyderabad . .	16,700	
Madras	1,394,744+88,000 (for small factories).	1,394,744
Bihar . . .	33,000	*Nil.*
C. P. and Berar .	127,000	*Nil.*
Punjab . . .	2,452,500 (cotton goods only).	88,568
U. P. . . .	1,480,600	984,587

From the above figures it is apparent that the D. G. C. I.'s figures omit certain Provinces such as Bihar and C. P. and Berar altogether while in the case of the Punjab, they account for only a fraction of the production. The figures for the Indian States also seem to err on the side of under-statement. In this connection a reference to the Tariff Board Report, 1932, on the Cotton Textile Industry (para. 186) is invited. It will be seen that the position in this regard still remains the same. Bulletin No. 87 issued by the Industries Department of the Government of Bengal also indicates in the same direction. It appears that only 36 out of 125 factories

in Bengal come under the operation of the Factories Act. We have been favoured with a detailed statement of the number of bales of 400 lbs. each of cotton yarn issued by the Madura Mills from year 1930 onwards. The figures are given below: —

Madura Mills' supply of hosiery yarn.

Year.	Bales.	In Million lbs.	Year.	Bales.	In Million lbs.
1930 . . .	1,506	0·60	1936 . .	14,791	5·91
1931 . . .	871	0·35	1937 . .	20,288	8·11
1932 . . .	1,318	0·53	1938 . .	19,642	7·85
1933 . . .	1,683	0·67	1939 . .	26,246	10·49
1934 . . .	4,814	1·67	1940 . .	26,277	10·51
1935 . . .	7,851	3·14			

Mr. J. M. Doak, of the Madura Mills, in a letter to us, states that 75 per cent., if not more, of the total yarn consumed by hosiery factories in India is supplied by the Madura Mills. We are not in a position to verify this statement, but can roughly say that it may be true of one or two years but cannot apply to all the years covered by our tables. For example, in 1930, Madura Mills supplied 0·6 million lbs. and in 1931 0·35 million lbs. Converting these figures for the official year 1930-31, we get 0·54 million lbs. as an approximate estimate of their supply. During the same year, the reporting factories alone, according to the Director-General of Commercial Intelligence and Statistics, produced 1·67 million lbs. of hosiery. If we add the non-reporting factories to this, the Madura supply will be even smaller than 35 per cent. Thus the Madura percentage cannot be taken to apply to all years equally. The D. G. C. I.'s figures, on the other hand, provide a stable basis for computation and for a longer period. It may not be incorrect to assume that the reported production over a series of years has grown to the same extent as the non-reported production, in which case there must be a steady ratio between the two. The U. P. Textile Expert, Mr. Shroff, is of the opinion that in the case of the United Provinces at least the ratio of reported to non-reported hosiery production may be 40 : 60, *i.e.*, 1 : 1½. In view of the serious gap in the Punjab figures and the importance of that Province in regard to the hosiery industry, we are inclined to assume the ratio of the reported to the non-reported production for India as a whole as 1 : 2, mainly because in Madras the smaller factories produce very little.

Estimated hosiery production.

Year.	D.G.C.I.'s figure.	Total estimated production.	Year.	D.G.C.I.'s figure.	Total estimated production.
1900-01 . .	0·39	1·17	1920-21 . .	0·41	1·23
1901-02 . .	0·46	1·38	1921-22 . .	0·36	1·08
1902-03 . .	0·61	1·83	1922-23 . .	0·44	1·32
1903-04 . .	0·82	2·46	1923-24 . .	0·55	1·65
1904-05 . .	0·76	2·28	1924-25 . .	0·67	2·01
1905-06 . .	0·76	2·28	1925-26 . .	0·87	2·61
1906-07 . .	0·80	2·40	1926-27 . .	0·98	2·94
1907-08 . .	0·73	2·19	1927-28 . .	1·21	3·63
1908-09 . .	0·60	1·80	1928-29 . .	1·48	4·44
1909-10 . .	0·62	1·86	1929-30 . .	1·92	5·76
1910-11 . .	0·62	1·86	1930-31 . .	1·67	5·01
1911-12 . .	0·50	1·50	1931-32 . .	1·97	5·91
1912-13 . .	0·50	1·50	1932-33 . .	2·54	7·62
1913-14 . .	0·47	1·41	1933-34 . .	2·34	7·02
1914-15 . .	0·29	0·87	1934-35 . .	4·72	14·16
1915-16 . .	0·36	1·08	1935-36 . .	5·30	15·90
1916-17 . .	0·41	1·23	1936-37 . .	6·50	19·50
1917-18 . .	0·35	1·05	1937-38 . .	7·50	22·50
1918-19 . .	0·26	0·78	1938-39 . .	7·53	22·59
1919-20 . .	0·29	0·87	1939-40 . .	7·89	23·67

APPENDIX VIII.

A Note on the Consumption of Cotton Yarn by Powerlooms.

The estimate of consumption of yarn by powerlooms has presented considerable difficulty. The small-scale powerloom factories are not required to supply figures of their production under the Cotton Statistics Act. Thus their production is not covered by the figures supplied by the Department of Commercial Intelligence and Statistics. The Madura Mills have kindly furnished to the Committee figures for cotton yarn supplied by them to weaving factories. It appears, however, that these figures include consumption of their yarn by large-scale factories also to some extent. Although the large-scale weaving mills in India have their own supply of yarn, when they run short of stocks, they buy from the general market. The powerlooms, no doubt, buy their yarn to a considerable extent from Madura, but their consumption of foreign yarn, especially mercerised and two-folds is equally large. Moreover, a large number of powerlooms in the Punjab, in Surat, in Mysore and elsewhere, consume silk and artificial silk yarns. To arrive at an approximate estimate of the cotton yarn consumption of powerlooms, therefore, we have had to take the total number of powerlooms devoted to production of cotton goods. Fortunately, the majority of Provinces and States have furnished statements regarding powerlooms classified according to the kind of textile used by them. These statements are pooled in the table below.

Powerlooms classified according to textile used.

Province or State.	Cotton.	Wool.	Silk.	Artificial silk.	Jute or any other fibre.	Mixture.	Total.
Assam	9	..	..	..	..	..	9
Bengal	16	..	..	..	..	..	16
Bihar	..	..	..	104	..	..	104
Bombay	4,225	..	1,000	1,025	..	100	6,350
C. P. and Berar	..	..	..	..	..	..	745
Madras	2	..	45	..	..	15	270
Orissa	..	..	..	..	..	..	..
Punjab	109	330	..	430	..	300	1,169
Sind	..	..	..	..	..	..	..
U. P.	..	..	..	..	..	..	..
Baroda	3	..	..	25	6	75	109
Cochin	..	..	..	..	..	..	..
Gwalior	..	..	..	..	..	..	..
Hyderabad	..	..	..	..	..	240	240
Indore	..	..	..	..	..	..	..
Jammu and Kashmir	..	..	..	..	..	..	..
Kolhapur and the Deccan States.	1,189	..	..	..	..	122	1,311
Mysore*	600	..	500	200	..	..	1,300
Travancore	17	..	..	..	..	..	17
TOTAL	6,378	330	1,545	1,784	6	852	11,640

* Cotton and artificial silk combined . . . . . 800 looms.
Assuming ½ artificial silk . . . . . 200 looms.

It will appear that out of a total of 11,640 powerlooms, 6,378 powerlooms are devoted to production of cotton piecegoods. The Government of Central Provinces and Berar have not

given separate figures for each textile; also the Bombay Figures appear to be somewhat underestimated, while a number of States have not given any figures at all. For all these, therefore, we make an addition of 1,622 powerlooms so as to round off the original figure, thus bringing the total to 8,000. In addition to these, we must consider the powerlooms producing mixtures. The mixtures concerned are cloths for which the mixture is either in the warp or weft. We assume that on the average such powerlooms use 90 per cent. cotton and 10 per cent. mixture, or in other words, so far as cotton yarn consumption is concerned, 100 such looms are equivalent to 90 looms consuming cotton only. From the table above it will be seen that these are at present 852 powerlooms using mixtures. We round off this figure to 1,000 so as to account for the possible ... Thus using the above ratio, the equivalent of this in terms of cotton-using powerlooms would be 900 powerlooms. Thus we can say that the total of powerlooms using cotton yarn is approximately 8,900.

The next question to decide is the consumption of cotton yarn per loom per annum. The estimates of cotton cloth production by powerlooms have been supplied by the Governments of certain Provinces and States. From these we get the following averages of annual consumption of cotton yarn per loom :—

Consumption of cotton yarn per annum per powerloom.

	Lbs.
Punjab	566·3
C. P. and Berar	695·8
Ichalkaranji	1,080·0
Mysore	3,780·0

The Mysore figure appears to be an impossibility, while as regards the first two Provinces it is not known whether the production is a full-time, annual consumption. The Ichalkaranji figure, however, seems to be nearer the mark. In the course of evidence, 1,000 lbs. per annum was considered to be a good average by some witnesses. We, therefore, take this as the basic average. Accordingly, for the year 1938-39, the total powerloom consumtion may be estimated at 8,900,000 lbs.

The next question to be decided is regarding the approximate consumption of yarn by powerlooms in the years prior to the year of our estimate, *viz.*, 1938-39. It appears that the small-scale powerloom factory, devoted to the production of cotton piecegoods, is more or less a recent phenomenon dating from the years of the last depression. In the depression, when the cotton mills curtailed production and, in some cases, went into liquidation, small capitalists in the neighbourhood of important mill centres purchased discarded looms second-hand and commenced weaving operations. Their growth from then onwards was phenomenal, because they combined the advantages of the handloom as well as of the large-scale machine. Thus, it would not be wrong to assume that prior to 1930-31, the consumption of cotton yarn by powerlooms was negligible. We, therefore, have to calculate figures backwards from 1938-39 up to 1930-31. In this connection the Madura Mills have kindly supplied to us certain figures for cotton yarn sold by them to weaving factories. This yarn is no doubt sold by them largely to powerloom factories; it is not possible, however, to say how much of it goes to powerlooms and how much to the mills, nor is it necessary for our purpose to do so. We feel that the rate of the progress of the small-scale powerloom industry can be fairly gauged by the rate of the growth of sales of cotton yarn by the above-mentioned group of mills to weaving factories. Madura Mills' figures are for calendar years. We, therefore, have converted them into figures for official years, adding one-fourth of the figure for each succeeding year to three-fourths of that of the preceding one. On that basis, we compute the figures for powerloom consumption of cotton yarn as follows :—

Cotton yarn consumption by powerlooms.

—	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	1937-38	1938-39
Madura yarn supplied to weaving mills (in bales).	127	439	936	1,665	2,334	2,848	3,141	3,281	3,906
Cotton yarn consumption by powerlooms (in million lbs.).	0·3	1·0	2·1	4·5	5·4	6·5	7·2	7·6	8·9

In the above table, we have calculated backwards the probable consumption of cotton yarn by powerlooms, taking 8·9 million lbs. in 1938-39 as the starting-point, and assuming that the rate of growth was commensurate with that of sales of yarn by Madura mills. It will appear also that prior to 1930-31, the consumption of yarn by powerlooms was almost negligible.

APPENDIX IX.

Cotton Yarn Consumption by Jute Mills.

This is a small item, but nonetheless one of growing importance lately. The jute mills require cotton yarn for various purposes which they get mainly from the Madura Mills. The Madura Mills have kindly supplied to us the figure for yarn sold by them to jute mills during the period 1930-40. The figures supplied were for calendar years, and it has been necessary to convert them into figures for official years. We have also added another 25 per cent. for cotton yarn supplied to jute mills by other spinning mills in the country.

Cotton Yarn Consumption by Jute Mills.

(In million lbs.)

Year.	Madura Mills' sales to Jute mills.	Additional 25 per cent. for other spinning mills.	Total.	Year.	Madura Mills' sales to Jute mills.	Additional 25 per cent. for other spinning mills.	Total.
1930-31	0·0967	0·0242	0·1209	1935-36	*Nil.*	*Nil.*	*Nil.*
1931-32	0·1380	0·0345	0·1725	1936-37	0·2003	0·0501	0·2504
1932-33	0·1189	0·0297	0·1486	1937-38	0·5517	0·1379	0·6896
1933-34	*Nil.*	*Nil.*	*Nil.*	1938-39	0·6185	0·1546	0·7731
1934-35	*Nil.*	*Nil.*	*Nil.*	1939-40	0·9028	0·2257	1·1285

It will be seen that the years 1933-34 to 1935-36 show little or no consumption. This has been due to the fact that during these years the jute industry was going through a period of depression.

APPENDIX X.

Cotton Yarn used in the production of Fishing Nets.

No figures are available for the total quantity of yarn consumed in the production of fishing nets. A reference on this point was made to the Provincial and State Governments and we have received the following estimates from some of them :—

Some Estimates of the quantity of cotton yarn used in fishing nets.

	(In million lbs.)
Assam . .	0·009
Bengal . .	1·020
Bihar . .	0·001
Madras . .	1·459
Punjab . .	0·002
Cochin . .	0·200
TOTAL .	2·691

It may not be incorrect to assume that 75 per cent. of the above quantity of cotton yarn is consumed in other maritime and inland areas, which would bring our total estimate to 4·7 million lbs. We have also made enquiries from the fishing trade and we have been told that on the average a fisherman makes three nets of cotton yarn per year, two of which require about 2½ lbs. of cotton yarn of 22s or 24s each and one of the same counts, a little bigger than the other two, would require about 4 lbs. of yarn. Thus we assume 9 lbs. per annum as the average consumption of a fisherman. We have referred to the Censuses of 1901, 1911, 1921 and 1931 for the number of persons engaged in fishing. We assume that 50 per cent. of these were owners of nets and accordingly arrive at the following computations :—

Cotton yarn used in fishing.

Census year.	Number of persons engaged in fishing.	Yarn consumed in lbs.	Census year.	Number of persons engaged in fishing.	Yarn consumed in lbs.
1901 . .	578,558	2,603,511	1921 . .	706,594	3,179,673
1911 . .	831,746	3,742,857	1931 . .	967,880	4,355,460

We assume that the figure for 1901 applies to the entire period of 1900-01 to 1909-10; that for 1911 to the period 1910-11 to 1919-20; that for 1921 to the period 1920-21 to 1929-30; and that for 1931 to the years 1930-31 onwards. It will be noticed, by the way, that the 1931 figure, *viz.*, 4·35 million lbs. corresponds closely to the independent estimate arrived at for 1938-39 from the figures supplied by the Provincial and State Governments, *viz.*, 4·7 million lbs. We could have graded the figures for the intercensal years on the basis of intercensal population of fishermen, but felt that such nicety would not make any material difference in the final result, besides involving us in some demographic speculation.

APPENDIX XI.

Consumption of Cotton Yarn for the manufacture of Cotton Rope and Twine.

Mr. Sankalchand G. Shah of Bombay estimates that about ¾ per cent. of the total quantity of yarn produced in India is available for cotton rope and twine. For 1938-39, this would amount to about 9·75 million lbs. There is another estimate which seems nearer the truth, coming from the same source, that the making of cotton rope and twine uses up 25 per cent. of the yarn produced in India under counts, 4s, 5s and 6s. The total production of yarn in these counts for each year in the period 1900-39 is given below :—

	(In million lbs.)			(In million lbs.)	
Year	Production of Yarn in counts 4s—6s in India.	25 per cent. of column 2.	Year.	Production of Yarn in counts 4s—6s in India.	25 per cent. of column 2.
(1)	(2)	(3)	(1)	(2)	(3)
1900-01 .	8·5	2·1	1920-21 .	13·7	3·4
1901-02 .	15·4	3·8	1921-22 .	16·8	4·2
1902-03 .	16·6	4·2	1922-23 .	17·1	4·3
1903-04 .	15·3	3·8	1923-24 .	15·8	3·9
1904-05 .	14·4	3·6	1924-25 .	18·3	4·6
1905-06 .	16·3	4·1	1925-26 .	18·5	4·6
1906-07 .	18·5	4·6	1926-27 .	20·4	5·1
1907-08 .	23·1	5·8	1927-28 .	20·1	5·0
1908-09 .	20·5	5·1	1928-29 .	17·3	4·3
1909-10 .	16·7	4·2	1929-30 .	21·1	5·3
1910-11 .	15·0	3·7	1930-31 .	20·3	5·1
1911-12 .	14·5	3·6	1931-32 .	19·2	4·8
1912-13 .	14·4	3·6	1932-33 .	18·5	4·6
1913-14 .	14·5	3·6	1933-34 .	19·5	4·9
1914-15 .	17·0	4·3	1934-35 .	20·0	5·0
1915-16 .	20·6	5·2	1935-36 .	19·3	4·8
1916-17 .	15·3	3·8	1936-37 .	20·1	5·0
1917-18 .	13·3	3·3	1937-38 .	22·2	5·6
1918-19 .	14·5	3·6	1938-39 .	23·7	5·9
1919-20 .	12·6	3·2	1939-40 .	19·8	4·9

APPENDIX XII.

Consumption of Yarn for Cotton Tape, Niwar, etc.

Under this head are included all sorts of cotton tapes, cords, *niwars*, etc., and the goods correspond to the heading "Miscellaneous" in the figures published by the Director-General of Commercial Intelligence and Statistics in the *Monthly Statistics of Cotton Spinning and Weaving in India*. The D. G. C. I.'s figures, however, include only the production of factories required by the law to supply figures. We have assumed that an equal quantity is produced in factories outside the operation of the Factories Act and made by hand by private producers; the total estimated quantity of yarn consumed on this account is given in Appendix XVII to which a reference may be made.

APPENDIX XIII.

Cotton Yarn consumed in the making of Cotton Braids.

In this connection reference may be made to the Tariff Board Report, 1932, on the Cotton Textile Industry (p. 181). The Tariff Board estimated the then production in India at 150,000 lbs. per annum and the imported quantity at 200,000 lbs. In 1934, protection was given to this branch of the industry, and in consequence, of late, imports have dwindled to almost nothing. No figures for the production of braids in the country are, however, available. We have, therefore, based our estimate on the figures supplied by some of the Provinces and States. The following figures may be taken as referring to the year 1938-39 :—

	Estimated quantity of yarn used in cotton braids.
	Lbs.
Bihar . .	4,000
Punjab . .	544,400
Baroda . .	10,138
TOTAL .	558,538

If we make an allowance of another 0·64 million lbs., a quantity equivalent to that produced in the Punjab, for the rest of India, we get a total of about 1·2 million lbs. It may be assumed that prior to 1931-32 production of cotton braids in the country was of a negligible order. The industry no doubt got a sudden spurt of increase in 1934-35. We assume that till then production stood at the same figure as in 1931-32 and from then onwards increased by equal proportions every year. Thus we arrive at the figures of 0·2 million, 0·2 million, 0·2 million, 0·4 million, 0·6 million, 0·8 million, 1 million and 1·2 millions for the years 1931-32 to 1938-39.

APPENDIX XIV.

Cotton Yarn consumed in Cotton Sewing, Darning, Embroidery and other sundry trades.

A considerable quantity of cotton yarn is consumed in cotton sewing, darning, crochet and embroidery work, as also in different trades and industries, such as the manufacture of lamp wicks, bandages, pyjama cords, garland and bouquet making, toy manufacture, leather manufacture, electrical industry, book-binding, cloth-button manufacture, etc. Since the grant of protection, quite a lot of small factories are engaged in producing these types of threads from the Indian mill-spun yarn, and imports of sewing and darning threads have somewhat fallen during the last five or six years. Of course, the imports of sewing and darning thread are not included in our figure for yarn, as they do not fall under the category, "twist and yarn" in the official import figures; but the fact remains that a considerable quantity of such thread is produced from mill-spun yarn, and also that in some of the minor trades, mill-spun yarn is directly used. In this connection a reference was made to the Provinces and States, some of which have supplied the following figures:—

Consumption of thread.

(In million lbs.)

	Cotton, sewing and darning.	Crochet and embroidery.
Assam	0·000500	0·000500
Bihar	0·010000	*Nil.*
Orissa	0·008537	0·002935
Punjab	0·450000	0·900000
Baroda	0·058000	*Nil.*
Cochin	0·005000	*Nil.*
TOTAL	0·532037	0·903435

From the above figures, it would appear that for cotton sewing, darning, crochet and embroidery work, total yarn consumed in the Provinces and States, mentioned in the table, amounts to 1·435 million lbs. Important producing Provinces like Bombay, Madras, Bengal and the United Provinces have not supplied us with figures. If we assume that the quantity produced in these Provinces and the rest of India amounts to twice as much as above, the total quantity would be 4·296 million lbs. It will be seen that this figure corresponds closely with independent estimates which are made by us and explained below.

These articles are mainly used by tailors, dress-makers, shoe-makers, and for the manufacture of padded quilts, cloths, *razais*, mattresses and pillows. In Northern India, padded quilts and *razais* are used to a large extent by the rich and poor alike, while pillows are used all over India. Ordinarily, the *dhunia* (who cards the cotton and stitches the pillow cases, etc.), uses threads in the form of balls of 2 oz. each. We have been told that two such balls, *i.e.*, 4 oz. are used per head and w assume that 10 per cent of the total population use these articles. Thus, the consumption cotton yarn on this account would be as follows:—

A.—Quilts, Razais, etc.

Census year.	Population.	10% × 4 oz. Lbs.
1901	294·4 mn.	2·9 mn. × 4/16 = 0·7 mn.
1911	315·2 mn.	3·2 mn. × 4/16 = 0·8 mn.
1921	318·9 mn.	3·2 mn. × 4/16 = 0·8 mn.
1931	352·8 mn.	3·5 mn. × 4/16 = 0·9 mn.

The four Censuses also contain figures for the total number of tailors, milliners, dress-makers and darners. We are told that they generally use ball threads in packets of 14 oz. per bundle and 2 such packets are used per worker per annum. Thus, we have calculated the total quantity of thread required by them by multiplying the total number of actual workers engaged in these trades by 1·75 (the weight in lbs. of two packets). The figures are reproduced below :—

B.—Tailors, Milliners, etc.

Year	Number of workers	The weight in Lbs. of two packets.	Total in million lbs.
1901 . .	0·569 million	× 1·75	= 0·978
1911 . .	0·637 million	× 1·75	= 1·115
1921 . .	0·577 million	× 1·75	= 1·012
1931 . .	0·719 million	× 1·75	= 1·258

The boots and shoes industry is an important one in India. It is reported that the workers generally use yarn in balls of 2 oz. each and 2 such balls are used per worker per month. The average consumption per annum would, therefore, amount to 24 balls of 2 oz. or 3 lbs. per annum. We have calculated the total consumption on this account by reference to the Census figures for the number of actual workers engaged in the boots and shoe making trade as under :—

C.—Boot and Shoe Makers.

Census year.	Boots and shoe-makers. (In mn.)	Total quantity of thread at 3 lbs. per worker. (In mn. lbs.)	Census year.	Boots and shoe-makers. (In mn.)	Total quantity of thread at 3 lbs. per worker. (In mn. lbs.)
1901 . .	0·853	2·559	1921 . .	0·860	2·580
1911 . .	0·832	2·496	1931 . .	0·852	2·556

We add up the consumption of thread under the three groups A, B and C above, and arrive at the following :—

1901 . .	4·3 million lbs.	1921 . .	4·4 million lbs.
1911 . .	4·4 million lbs.	1931 . .	4·8 million lbs.

For sundry trades enumerated at the beginning of this Appendix, we make a further allowance of 10 per cent. in addition to the above quantities ; this allowance would amount to 0·4 million lbs. for all the Census years. We assume that the figure for 1901 holds good for ten years commencing with 1900-01, the 1911 figure for the next following ten years and so on.

After having arrived at the above figures, we have now to subtract from the figure of each year the net imports of " thread, sewing or darning " for the year, because such imports, as stated already, are not included in our total for imported yarn. These net imports are given below for all years from 1900-01 onwards.

TABLE 13.—*Net Imports of Sewing or Darning Thread into India.*

Year.	Net Imports of thread (in million lbs.).	Year.	Net imports of thread (in million lbs.).
1900-01	0·64	1920-21	1·24
1901-02	0·73	1921-22	0·71
1902-03	0·94	1922-23	0·97
1903-04	0·80	1923-24	1·25
1904-05	0·94	1924-25	1·19
1905-06	1·04	1925-26	1·83
1906-07	1·02	1926-27	1·79
1907-08	1·09	1927-28	2·05
1908-09	0·96	1928-29	1·77
1909-10	1·07	1929-30	2·11
1910-11	1·12	1930-31	1·74
1911-12	1·38	1931-32	1·65
1912-13	1·48	1932-33	1·80
1913-14	1·40	1933-34	1·75
1914-15	1·02	1934-35	2·12
1915-16	1·59	1935-36	1·88
1916-17	1·90	1936-37	2·38
1917-18	1·49	1937-38	1·36
1918-19	1·02	1938-39	1·25
1919-20	0·59		

Thus to sum up, we add up the three figures for (A) quilts, *razais*, etc., (B) Tailors, milliners, etc., and (C) Boots and shoe-makers, etc., for each year. Next, we make an additional allowance of 10 per cent. on this for sundry trades. Finally, we subtract from the total the net imports of thread during each year, and arrive at the final figures which are entered in the column for "cotton sewing, darning, etc.," in Appendix XVII.

APPENDIX XV.

Relation between Weight of Yarn, Yardage of Cloth and Weight of Cloth.

In this Appendix we propose to discuss briefly the relation between weight of yarn, yardage of cloth and weight of cloth in regard to both handloom and mill production. This matter is of some importance as comparison between the two industries can be on the basis not only of yarn but also of weight and yardage of cloth produced.

Mill-made cloth.—The Industrial Commission in 1918 accepted the ratio of 100 lbs. of yarn to 112 lbs. of mill-made cloth. In 1932, before the Tariff Board, the Bombay Millowners' Association suggested that in view of the mills producing considerable quantities of cloth of finer counts of yarn, the ratio would be nearer 110 lbs. of cloth to 100 lbs. of yarn. The Ahmedabad Millowners' Association, in their memorandum submitted to us, have stated that in the year 1938-39 one lb. of cotton yarn yielded on the average 6·30 yards of cloth, and that 5·74 yards of cloth produced in Ahmedabad mills would weigh one lb. This means that 100 lbs. of yarn would yield $\frac{100 \times 6{\cdot}30}{5{\cdot}74}$ or 109·75 lbs. of cloth. Since all the mills are going over to finer counts recently, we think, it would be correct to take the ratio of 110 lbs. of mill-made cloth to 100 lbs. of yarn as more nearly correct for recent years. Accordingly, in converting the figures for the weight of mill-made cloth into figures for the weight of yarn consumed by mills in Appendix XVI, we have taken the ratio of 112 lbs. of cloth to 100 lbs. of yarn as applicable to all years from 1900-01 to 1930-31, and for the following years we have accepted the ratio of 110 lbs. of cloth to 100 lbs. of yarn.

The ratio between yardage of cloth and weight of cloth based on an earlier estimate and computed by dividing total yardage by total weight, as shown in the production figures supplied by the Director-General of Commercial Intelligence was 4·27 yards of cloth to 1 lb. of cloth. In recent years, however, owing to the tendency of mills to produce finer goods, the ratio has been rising continuously, and during the last six or seven years has hovered round 4·78 yards cloth : 1 lb. cloth. Thus, we accept the ratio of 4·27 yards cloth : 1 lb. cloth for the period 1900-01 to 1930-31, and the ratio 4·78 yards cloth : 1 lb. cloth for the succeeding years. (See Appendices XIX and XX.)

The relation between the yardage of cloth and weight of yarn has been calculated by taking into consideration the ratios between the weight of cloth and the weight of yarn, and the yardage of cloth and the weight of cloth. Thus, up to 1930-31, we have accepted the basis of 112 lbs. cloth : 100 lbs. yarn.

Hence,

100 lbs. of yarn = 112 lb. of mill-made cloth,
= 112 × 4·27 yards of mill-made cloth,
= 478·24 yards.

∴ 1 lb. of yarn = 4·78 yards of mill-made cloth.

Similarly, for the years following 1931-32, we have accepted the basis of 110 lbs. of cloth : 100 lbs. of yarn and the ratio of 4·78 yards of cloth to 1 lb. of cloth. Hence,

100 lbs. of yarn = 110 lbs. of mill-made cloth,
= 110 × 4·78 yards of mill-made cloth,
= 525·8 yards of mill-made cloth.

∴ 1 lb. of yarn = 5·26 yards of mill-made cloth.

Handloom cloth.—Mr. Robertson, in the *Review of Trade* for 1904-05, estimated that the total production of handloom cloth was double that of the mills. Mill production of cloth in the year was 670·0 million yards corresponding to 158·7 million lbs. of yarn. Thus, handloom production would amount to 317·4 million lbs. of yarn or 1,340 million yards of cloth. It would appear from this that in his opinion there would be a ratio of 1 lb yarn : 4·17 yards cloth for both mills and handlooms. Mr. Raoji B. Patel, in the First Industrial Conference, however, freshly computed the figures for handloom production, stating that 1,645 million yards of handloom cloth were produced from 317·4 million lbs. of yarn, which suggested a ratio of 1 lb. yarn : 5·18 yards cloth, for handlooms. Mr. R. D. Bell, in his *Notes on the Indian Textile Industry with Special Reference to Hand Weaving* (p. 2), assumes that 1 lb. of cotton yarn yields on the average 4 yards of handloom cloth. He has not stated any grounds for taking this ratio except that the bulk of handloom cloth is coarse. The Tariff Board, in their Report on the Cotton Textile Industry, 1932 (p. 39), expressed the view that " 4 yards per pound of yarn is too high an average for the handloom industry, in which.....at least 80 per cent. of the cloth is woven from the coarser counts of yarn," and that " the average yardage of cloth per pound is nearer 3 than 4." It is obvious that all these estimates were based upon mere guess-work, as not even approximate data as to the quantity of yarn used by the handloom weavers and the total yardage or weight of hand-woven cloth were available.

In the table below, we reproduce figures supplied by some of the Provincial and State Governments regarding the quantities of Indian mill yarn, imported mill yarn, and handspun yarn, used in handloom production as well as the total amounts of cotton cloth, woven on handlooms. It will appear that, for the Provinces and States supplying the data, the total of Indian

mill yarn is 286·56 million lbs., that of imported yarn is 26·81 million lbs., and that of hand-spun yarn is 49·34 million lbs. At the same time the total quantity of handloom cotton cloth produced in the same Provinces and States, amounts to 1580·62 million yards. Thus, if we take this latter figure for all kinds of cloth and divide it by the total quantity of mill and hand spun yarn used, the average ratio is 4·36 yards cloth : 1 lb. yarn. But if we deduct 148·02 million yards for 49·34 million lbs. of hand-spun yarn (assuming a ratio of 3 yards : 1 lb. in the case of the coarse cloth woven from hand-spun yarn), the balance of 1432·80 million yards will correspond to the total of Indian mill yarn and imported mill yarn, *viz.*, 313·37 million lbs. For mill yarn, therefore, the average ratio will be 4·57 yards : 1 lb. These ratios refer to the year 1938-39, and have been based upon figures collected by the Provincial and State Governments after detailed enquiries.

Relation between Weight of Yarn and Yardage of Handloom Cloth produced in some of the Provinces and States.

Province or State.	Indian mill-yarn (Mn. lbs.).	Imported yarn (Mn. lbs.).	Handspun yarn (Mn. lbs.)	Total cotton cloth produced (Mn. yards).
Assam	5·70	0·54	0·48	31·60
Bengal	25·06	4·41	0·17	148·21
Bihar	18·20	0·25	0·50	76·00
Bombay	39·83	3·83	3·09	174·24
C. P.	21·35	0·29	0·12	103·17
Madras	83·42	5·83	0·82	407·03
Orissa	14·43	0·24	0·06	56·18
Punjab	23·58	1·19	35·38	228·00
U. P.	43·05	1·65	6·51	255·13
Hyderabad . . .	9·50	7·93	0·30	76·61
Deccan States . . .	0·89	0·61	1·17	13·19
Jammu and Kashmir .	1·55	0·04	0·74	11·46
TOTAL .	286·56	26·81	49·34	1,580·82

In regard to the relation between the weight of yarn and the weight of cloth, we have found in our tours in Madras, Bengal and Bihar, that the cotton yarn is given to handloom weavers by weight and the same weight of cloth is generally received back. In the course of evidence, this fact was explained by witnesses who stated that the wastage of yarn in course of the preparatory processes was negligible and also that the additional weight given to the cloth by sizing the warp was equally insignificant. Therefore, the wastage of yarn is offset against any additional weight obtained by the cloth due to sizing, and the ratio of 100 lbs. of cotton yarn for 100 lbs. of hand-woven cloth, is assumed by the trade in these Provinces. However, in most of the Provinces, we have found that on some types of cloth either a small amount of starch is added to the weft yarn or a small quantity of a starchy solution is applied to the cloth after a few inches are woven to give it a stiff appearance. Considering that this additional starch is applied in excess of the quantity of starch given to the warps, it is bound to affect the size retention percentage of the final cloth. The size applied to the warp is squeezed thoroughly by hand, but still a small percentage is retained by the cloth and the application of size on the weft tends to give an additional weight to the cloth. This addition of starch together with the amount of size retained on the cloth cannot exceed 5 per cent. The amount of wastage of yarn in the handloom industry is very small and differs from place to place. But taking the figures supplied by all Provinces and States, we find that the average may safely be fixed at 3 per cent. With a 3 per cent. wastage in yarn and a 5 per cent. increase in weight on account of addition of starch, we get a ratio of 102 lbs. of hand-woven cloth for every 100 lbs. of cotton yarn.

The third ratio, *viz.*, that between the weight of cloth and the yardage of cloth can be found out by using the above two ratios. Thus, 1 lb. of yarn =4·57 yards of cloth. So, 100 lbs. of yarn=457 yards of cloth= 102 lbs. of cloth. Hence, 1 lb. of cloth=457/102 yards of cloth, or 4·48 yards of cloth.

It may be pointed out here that the ratio of the yardage of cloth to the weight of yarn has no definite meaning so long as one does not know the width of the cloth produced, the counts of yarn used, and the number of reeds and picks per inch. Again, in the absence of similar details for handloom as well as mill production, regarding the amount of size retention, the number of picks and reeds, the ratio of the weight of yarn to weight of cloth is also equally without any scientific significance. But since this method of rough estimation has been accepted by very competent authorities, we have been left with no option but to follow the system laid down. Besides, for arriving at comparative results for the two branches of the textile industry, there is no other known method. Hence we have computed the ratios afresh by reference to the relevant facts and figures and attempted to modify the earlier estimates as far as possible.

APPENDIX XVI.

Statement showing the "free yarn" available for sale.

(*In million lbs.*)

Year.	Imports of yarn.	Indian mill production of yarn.	Total of previous two columns.	Exports including re-exports of yarn by land and sea.	Balance of yarn available for consumption in India (Col. 4 *minus* Col. 5).	Cloth produced in Indian mills (weight).	Yarn consumed by mills (approximate equivalent at 112 lbs. cloth = 100 lbs. yarn (up to 1930-31) : 110 lbs. cloth = 100 lbs. yarn after 1931-32.	"Free yarn" available for sale (Col. 6 *minus* Col. 8).
1	2	3	4	5	6	7	8	9
1900-01 .	33	353	388	127	261	99	88	173
1901-02 .	38	573	611	285	326	119	106	220
1902-03 .	34	576	610	261	349	122	109	240
1903-04 .	28	579	607	265	342	136	121	221
1904-05 .	31	578	609	261	348	156	139	209
1905-06 .	46	681	727	310	417	162	145	272
1906-07 .	38	654	692	256	436	165	147	289
1907-08 .	37	638	675	230	445	188	168	277
1908-09 .	42	658	700	249	451	192	171	280
1909-10 .	40	628	668	240	428	228	204	224
1910-11 .	33	610	643	195	448	244	218	230
1911-12 .	42	625	667	168	499	266	238	261
1912-13 .	50	688	738	224	514	285	254	260
1913-14 .	44	683	727	215	512	274	245	267
1914-15 .	43	652	695	152	543	276	246	297
1915-16 .	40	722	762	200	562	351	313	249
1916-17 .	30	681	711	201	510	376	336	174
1917-18 .	19	661	680	143	537	379	338	199
1918-19 .	38	615	653	105	548	347	310	238

APPENDIX XVI—*contd.*

Statement showing the "free yarn" available for sale—contd.

(In million lbs.)

Year.	Imports of yarn.	Indian mill production of yarn.	Total of previous two columns.	Exports including re-exports of yarn by land and sea.	Balance of yarn available for consumption in India (Col. 4 *minus* Col. 5).	Cloth produced in Indian mills (weight).	Yarn consumed by mills (approximate equivalent at 112 lbs. cloth=100 lbs. yarn (up to 1930-31); 110 lbs. cloth =100 lbs. yarn after 1931-32.	"Free yarn" available for sale (Col. 6 *minus* Col. 8).
1	2	3	4	5	6	7	8	9
1919-20 .	15	636	651	169	482	382	341	141
1920-21 .	47	660	707	133	574	366	327	247
1921-22 .	57	694	751	142	609	402	359	250
1922-23 .	59	706	765	117	648	403	360	288
1923-24 .	45	617	662	86	576	398	355	221
1924-25 .	56	719	775	96	679	454	405	274
1925-26 .	52	686	738	83	655	460	411	244
1926-27 .	49	807	856	55	801	531	474	327
1927-28 .	52	809	861	36	825	556	496	329
1928-29 .	44	648	692	36	656	436	389	267
1929-30 .	44	834	878	38	840	552	493	347
1930-31 .	29	867	896	36	860	581	519	341
1931-32 .	32	966	998	33	965	661	601	364
1932-33 .	45	1,016	1,061	27	1,034	686	624	410
1933-34 .	32	921	953	25	928	637	579	349
1934-35 .	34	1,001	1,035	21	1,014	722	656	358
1935-36 .	45	1,059	1,104	18	1,086	746	678	408
1936-37 .	29	1,051	1,080	19	1,061	764	695	366
1937-38 .	22	1,161	1,183	36	1,147	843	766	381
1938-39 .	36	1,303	1,339	34	1,305	899	817	488
1939-40 .	41	1,235	1 276	27	1,249	854	776	473

APPENDIX XVII.

Statement showing the yarn "available" to the handloom industry as a residual balance.

Year.	"Free yarn"	Group I.			Group II.					Net balance for handloom.
		Power-looms.	Hosiery.	Jute mills.	Fishing nets.	Cotton rope and twine.	Cotton tape niwar, etc.	Cotton braids.	Cotton sewing, darning, etc.	
1	2	3	4	5	6	7	8	9	10	11
1900-01	173	(a)	1·2	(a)	2·6	2·1	1·4	(a)	4·1	161·6
1901-02	220	..	1·4	..	2·6	3·8	1·4	..	4·0	206·8
1902-03	240	..	1·8	..	2·6	4·2	1·4	..	3·8	226·2
1903-04	221	..	2·4	..	2·6	3·8	1·6	..	3·9	206·7
1904-05	249	..	2·3	..	2·6	3·6	2·4	..	3·8	234·3
1905-06	272	..	2·3	..	2·6	4·1	1·0	..	3·7	258·3
1906-07	289	..	2·4	..	2·6	4·6	-0·3	..	3·7	275·4
1907-08	277	..	2·2	..	2·5	5·8	0·2	..	3·6	262·6
1908-09	280	..	1·8	..	2·6	5·1	0·2	..	3·8	266·5
1909-10	224	..	1·9	..	2·6	4·2	0·3	..	3·6	211·4
1910-11	230	..	1·9	..	3·7	3·7	0·1	..	3·6	217·0
1911-12	261	..	1·5	..	3·7	3·6	0·1	..	3·4	248·7
1912-13	260	..	1·5	..	3·7	3·6	0·2	..	3·3	247·7
1913-14	267	..	1·4	..	3·7	3·6	0·2	..	3·4	254·7
1914-15	297	..	0·9	..	3·7	4·3	0·3	..	3·8	284·0
1915-16	249	..	1·1	..	3·7	5·2	0·6	..	3·2	235·8
1916-17	174	..	1·2	..	3·7	3·8	1·0	..	2·9	161·4
1917-18	199	..	1·1	..	3·7	3·3	3·3	..	3·3	185·3
1918-19	238	..	0·8	..	3·7	3·6	3·7	..	3·7	222·5
1919-20	141	..	0·9	..	3·7	3·2	2·5	..	4·2	126·5
1920-21	247	..	1·2	..	3·2	3·4	2·8	..	3·6	232·8
1921-22	250	..	1·1	..	3·2	4·2	2·9	..	4·1	234·5
1922-23	288	..	1·3	..	3·2	4·3	4·4	..	3·8	271·0
1923-24	221	..	1·7	..	3·2	3·9	4·5	..	3·5	204·2
1924-25	274	..	2·0	..	3·2	4·6	7·9	..	3·6	252·7
1925-26	244	..	2·6	..	3·2	4·6	7·5	..	3·0	223·1
1926-27	327	..	2·9	..	3·2	5·1	8·6	..	3·0	304·2
1927-28	329	..	3·6	..	3·2	5·0	11·7	..	2·8	302·7
1928-29	267	..	4·4	..	3·2	4·3	8·8	..	3·0	243·3
1929-30	347	..	5·8	..	3·2	5·1	9·6	..	2·7	320·6
1930-31	341	0·3	5·0	0·1	4·4	4·8	8·5	..	3·6	314·3
1931-32	364	1·0	5·9	0·2	4·4	4·8	10·7	0·2	3·2	333·1
1932-33	410	2·1	7·6	0·1	4·4	4·6	7·8	0·2	3·4	379·8
1933-34	349	4·5	7·0	(a)	4·4	4·9	9·0	0·2	3·5	315·5
1934-35	358	5·4	14·2	..	4·4	5·0	11·5	0·4	3·2	313·9
1935-36	408	6·5	14·4	..	4·4	4·8	11·3	0·6	3·4	362·6
1936-37	366	7·2	17·9	0·3	4·4	5·0	11·2	0·8	2·9	316·3
1937-38	381	7·6	22·5	0·7	4·4	5·6	12·0	1·0	3·9	323·3
1938-39	488	8·9	22·6	0·8	4·4	5·9	14·4	1·2	4·0	425·8

(a) As from this date and up to the year for which figures are given later, the amount of yarn is nil or negligible.

APPENDIX XVIII.

Statement showing the estimated cotton cloth production of the handloom industry.

Year	Net balance of yarn available to handlooms (million lbs.)	Cloth produced on handlooms.	
		(In million yards)— at { 1 lb. yarn=4 yds. up to 1930-31. 1 lb. yarn=4·57 yds. from 1931-32.	(In million lbs.) 100 lbs. yarn= 102 lbs. cloth.
1	2	3	
1900-01	161·6	646·4	164·3
1901-02	206·8	827·2	210·9
1902-03	226·2	904·8	230·7
1903-04	206·7	826·8	210·8
1904-05	234·3	937·2	239·0
1905-06	258·3	1,033·2	263·5
1906-07	275·4	1,101·6	280·9
1907-08	262·6	1,050·4	267·9
1908-09	266·5	1,066·0	271·8
1909-10	211·4	845·6	215·6
1910-11	217·0	868·0	221·3
1911-12	248·7	994·8	253·7
1912-13	247·7	990·8	252·3
1913-14	254·7	1,018·8	259·8
1914-15	284·0	1,136·0	289·7
1915-16	235·8	943·2	240·5
1916-17	161·4	645·6	164·6
1917-18	185·3	741·2	189·0
1918-19	222·5	890·0	227·0
1919-20	126·5	506·0	129·0
1920-21	232·8	931·2	237·5
1921-22	234·5	938·0	239·2
1922-23	271·0	1,084·0	276·4
1923-24	204·2	816·8	209·3
1924-25	252·7	1,010·8	257·8
1925-26	222·1	888·4	226·5
1926-27	304·2	1,216·8	310·8
1927-28	302·7	1,210·8	308·8
1928-29	243·3	973·2	248·2
1929-30	320·6	1,282·4	327·0
1930-31	314·3	1,257·2	320·6
1931-32	333·1	1,522·3	339·8
1932-33	379·8	1,735·7	387·4
1933-34	315·5	1,441·8	321·8
1934-35	313·9	1,434·5	320·2
1935-36	362·6	1,657·1	369·9
1936-37	316·3	1,445·5	322·6
1937-38	323·3	1,477·0	329·8
1938-39	425·8	1,945·9	434·3

APPENDIX XIX.

Annual production of cotton cloth in India (in million yas.).*

Year.	Indian mill production.	Percentage of total production.	Handloom production.	Percentage of total production.	Total production.
1	2	3	4	5	6
1900-01 . . .	420·6	39·4	646·4	60·6	1,067·0
1901-02 . . .	506·7	38·0	827·2	62·0	1,333·9
9902-03 . . .	521·0	36·5	904·8	63·5	1,425·8
1903-04 . . .	578·4	41·2	826·8	58·8	1,405·2
1904-05 . . .	664·4	41·5	937·2	58·5	1,601·6
1905-06 . . .	693·1	40·2	1,033·2	59·8	1,726·3
1906-07 . . .	702·7	38·9	1,101·6	61·1	1,804·3
1907-08 . . .	803·0	43·4	1,050·4	56·6	1,853·4
1908-09 . . .	817·4	43·4	1,066·1	56·6	1,883·5
1909-10 . . .	975·1	53·6	845·6	46·4	1,820·7
1910-11 . . .	1,042·0	54·6	868·0	45·4	1,910·0
1911-12 . . .	1,137·6	53·4	994·8	46·6	2,132·4
1912-13 . . .	1,214·1	55·5	990·8	44·5	2,204·9
1913-14 . . .	1,171·1	53·5	1,018·8	46·5	2,189·9
1914-15 . . .	1,175·9	50·8	1,136·0	49·2	2,311·9
1915-16 . . .	1,496·1	61·4	943·2	38·6	2,439·3
1916-17 . . .	1,606·1	71·3	645·6	28·7	2,251·7
1917-18 . . .	1,615·6	60·1	741·2	39·9	2,356·8
1918-19 . . .	1,481·8	62·5	890·0	37·5	2,371·8
1919-20 . . .	1,630·0	76·3	506·0	23·7	2,136·0
1920-21 . . .	1,563·1	62·7	931·2	37·3	2,494·3
1921-22 . . .	1,716·0	64·7	938·0	35·3	2,654·0
1922-23 . . .	1,720·8	61·3	1,084·0	38·7	2,804·8
1923-24 . . .	1,696·9	67·5	816·8	32·5	2,513·7
1924-25 . . .	1,935·9	65·7	1,010·8	34·3	2,946·7
1925-26 . . .	1,964·6	68·9	888·4	31·1	2,853·0
1926-27 . . .	2,265·7	65·1	1,216·8	34·9	3,482·5
1927-28 . . .	2,370·9	66·2	1,210·8	33·8	3,581·7
1928-29 . . .	1,850·4	65·6	973·2	34·4	2,832·6
1929-30 . . .	2,356·5	64·8	1,282·4	35·2	3,638·9
1930-31 . . .	2,480·8	66·4	1,257·2	33·6	3,738·0
1931-32 . . .	2,872·8	68·3	1,332·4	31·7	4,205·2
1932-33 . . .	2,982·7	66·3	1,519·2	33·7	4,501·9
1933-34 . . .	2,767·6	68·7	1,262·0	31·3	4,029·6
1934-35 . . .	3,135·7	71·4	1,255·6	28·6	4,391·3
1935-36 . . .	3,240·8	69·3	1,450·4	30·7	4,691·2
1936-37 . . .	3,322·1	72·4	1,265·2	27·6	4,587·3
1937-38 . . .	3,661·5	73·9	1,293·2	26·1	4,954·7
1938-39 . . .	3,905·3	69·6	1,703·2	30·4	5,608·5

*In this table, the conversion of yarn into cloth, for both mills and handlooms, has been made on the basis of the old ratios, *i.e.*, 1 lb. of yarn=4 yards of cloth (in the case of handlooms), and 1 lb. of yarn=4·78 yards of cloth (in that of mills).

APPENDIX XX.

*Annual production of cotton cloth on the basis of the new ratios.**

(In million yards).

Year.	Indian mill production.	Percentage.	Handloom production.	Percentage.	Total production.
1931-32 . . .	3,161·2	67·5	1,522·3	32·5	4,683·5
1932-33 . . .	3,282·2	65·4	1,735·7	34·6	5,017·9
1933-34 . . .	3,045·5	67·9	1,441·8	32·1	4,487·3
1934-35 . . .	3,450·6	70·7	1,434·5	29·3	4,885·1
1935-36 . . .	3,566·3	68·3	1,657·1	31·7	5,223·4
1936-37 . . .	3,655·7	71·7	1,445·5	28·3	5,101·2
1937-38 . . .	4,029·2	73·2	1,477·0	26·8	5,506·2
1938-39 . . .	4,297·4	68·8	1,945·9	31·2	6,243·3

*In this table, conversion of yarn into cloth has been made on the basis of the new ratios, *i.e.*, 1 lb. of yarn=5·26 yards of cloth (in the case of mills) and 1 lb. of yarn=4·57 yards of cloth (in that of handlooms).

APPENDIX XXI.

Statement regarding the consumption of cotton cloth in India and the percentage shares of mills, handlooms and foreign imports.

Year.	Population in millions.	Net imports.	Percentage.	Retained Indian mill production	Percentage.	Handloom production.	Percentage.	Total (3+5+7).	Per capita consumption.
1	2	3	4	5	6	7	8	9	10
1900-01	294·4	1,875	66·3	309·6	10·9	646·4	22·8	2,831·0	9·6
1901-02	296·5	2,042	62·7	386·7	11·9	827·2	25·4	3,255·9	11·0
1902-03	298·8	1,986	60·2	412·0	12·4	904·8	27·4	3,302·8	11·1
1903-04	300·6	1,903	59·8	453·4	14·2	826·8	26·0	3,183·2	10·6
1904-05	302·7	2,152	59·5	529·4	14·6	937·2	25·9	3,618·6	11·9
1905-06	304·8	2,335	59·4	564·1	14·3	1,033·2	26·3	3,932·3	12·9
1906-07	306·9	2,193	56·5	587·7	15·1	1,101·6	28·4	3,882·3	12·6
1907-08	309·0	2,401	57·9	691·0	16·7	1,050·4	25·4	4,142·4	13·4
1908-09	311·0	1,870	51·4	704·4	19·4	1,066·1	29·2	3,640·5	11·7
1909-10	313·1	2,070	54·9	849·1	22·6	845·6	22·5	3,764·7	12·0
1910-11	315·2	2,162	54·9	908·0	23·1	868·0	22·0	3,938·0	12·5
1911-12	315·6	2,262	52·9	1,019·6	23·8	994·8	23·3	4,276·4	13·6
1912-13	315·9	2,847	57·8	1,089·1	22·1	990·8	20·1	4,926·9	15·6
1913-14	316·3	3,042	59·6	1,041·1	20·8	1,018·8	19·6	5,101·9	16·1
1914-15	316·7	2,327	51·4	1,065·9	23·5	1,136·0	25·1	4,528·9	14·3
1915-16	317·1	2,019	47·0	1,335·1	31·1	943·2	21·9	4,297·3	13·6
1916-17	317·4	1,771	47·6	1,297·1	35·0	645·6	17·4	3,713·7	11·7
1917-18	317·8	1,406	39·8	1,381·6	39·2	741·2	21·0	3,527·8	11·1
1918-19	318·2	955	30·4	1,294·8	41·3	890·0	28·3	3,139·8	9·8
1919-20	318·5	836	30·6	1,391·0	50·9	506·0	18·5	2,733·0	8·6
1920-21	318·9	1,405	37·7	1,393·1	37·4	931·2	24·9	3,729·3	11·7
1921-22	322·3	980	28·4	1,529·0	44·4	938·0	27·2	3,447·0	10·7
1922-23	325·7	1,467	35·9	1,534·8	37·6	1,084·0	26·5	4,085·8	12·5
1923-24	329·1	1,374	37·8	1,405·9	40·8	816·8	22·1	3,686·7	11·2
1924-25	332·5	1,710	38·6	1,705·9	39·6	1,010·8	21·8	4,426·7	13·3
1925-26	335·9	1,529	36·3	1,800·6	42·7	888·4	21·0	4,218·0	12·6
1926-27	339·2	1,759	34·9	2,067·7	41·0	1,216·8	24·1	5,043·5	14·9
1927-28	342·6	1,939	36·0	2,202·9	41·2	1,210·8	22·8	5,352·7	15·6
1928-29	346·0	1,913	41·6	1,710·4	37·2	973·2	21·2	4,596·6	13·3
1929-30	349·4	1,897	35·1	2,223·5	41·2	1,282·4	23·7	5,402·9	15·5
1930-31	352·8	873	19·4	2,382·8	52·8	1,257·2	27·8	4,513·0	12·8
1931-32	358·1	760	15·7	2,767·8	56·9	1,332·4	27·4	4,860·2	13·6
1932-33	363·4	1,209	21·3	2,916·7	51·7	1,519·2	27·0	5,638·9	15·5
1933-34	368·7	771	16·3	2,711·6	57·2	1,262·0	26·5	4,744·6	12·9
1934-35	374·0	983	17·7	3,077·7	58·4	1,255·6	23·9	5,296·3	14·1
1935-36	379·3	937	16·9	3,169·9	57·0	1,450·4	26·1	5,557·2	14·6
1936-37	384·6	753	14·4	3,220·1	61·5	1,265·2	24·1	5,238·3	13·6
1937-38	389·9	579	10·9	3,420·6	64·6	1,293·2	24·5	5,292·7	13·6
1938-39	395·2	631	10·4	3,788·9	61·6	1,703·2	28·0	6,073·6	15·4

(1) *Net imports.*—Imports of cotton piecegoods *minus* re-exports.

(2) *Retained Indian Mill production.*—Indian Mill production of cotton piecegoods *minus* exports of cotton piecegoods. The figures used are our estimated figures.

(3) *Handloom production.*—Exports of Handloom production are not taken into account. These exports are included in general export figures which have been used for item (5). The figures used are our estimated figures.

APPENDIX XXI-A.

Five-year Moving Averages of the Annual Consumption of cloth in India.

Year.	Net imports.	Retained mill production.	Handloom production.	Year.	Net imports.	Retained mill production.	Handloom production.
1	2	3	4	1	2	3	4
1900-01 .	..	..	..	1920-21 .	1,128·6	1,428·6	870·6
1901-02 .	..	..	..	1921-22 .	1,212·4	1,468·8	855·2
1902-03 .	1,991·6	418·2	828·5	1922-23 .	1,387·2	1,531·7	956·2
1903-04 .	2,083·6	469·1	905·8	1923-24 .	1,412·0	1,613·2	947·6
1904-05 .	2,113·8	509·3	960·7	1924-25 .	1,567·8	1,721·9	1,003·4
1905-06 .	2,196·8	564·5	989·8	1925-26 .	1,662·2	1,854·6	1,008·7
1906-07 .	2,190·2	615·3	1,037·7	1926-27 .	1,770·0	1,897·5	1,060·0
1907-08 .	2,173·4	679·3	1,019·4	1927-28 .	1,807·4	2,001·0	1,114·3
1908-09 .	2,139·2	748·0	986·4	1928-29 .	1,676·2	2,117·5	1,188·1
1909-10 .	2,153·0	834·4	964·9	1929-30 .	1,476·4	2,257·5	1,211·2
1910-11 .	2,242·2	914·0	943·5	1930-31 .	1,329·2	2,400·2	1,272·9
1911-12 .	2,476·6	981·4	934·0	1931-32 .	1,100·8	2,600·5	1,330·6
1912-13 .	2,528·0	1,024·7	982·5	1932-33 .	908·0	2,771·3	1,325·3
1913-14 .	2,499·4	1,110·2	997·8	1933-34 .	920·8	2,928·7	1,363·9
1914-15 .	2,401·2	1,165·7	918·4	1934-35 .	919·4	3,019·2	1,350·5
1915-16 .	2,112·8	1,224·2	878·1	1935-36 .	794·6	3,119·9	1,305·3
1916-17 .	1,695·4	1,274·9	853·1	1936-37 .	766·6	3,325·3	1,393·5
1917-18 .	1,397·2	1,339·9	736·7	1937-38 .	..	..	..
1918-19 .	1,074·4	1,351·5	734·0	1938-39 .	..	..	..
1919-20 .	1,116·2	1,397·9	802·1				

APPENDIX XXII.

Annual consumption of cotton cloth in India on the basis of new ratios (1931-39).

Year.	Population in millions.	Net imports (million yds.)	Percentage of total.	Retained Indian mill production (million yds.)	Percentage of total.	Handloom production (million yds.)	Percentage of Total.	Total (million yds.)	Per capita consumption (yds.)
1931-32 . . .	358·1	760	14·3	3,056·2	57·3	1,522·3	28·4	5,338·5	14·9
1932-33 . . .	363·4	1,203	19·6	3,216·2	52·3	1,735·7	28·1	6,154·9	16·9
1933-34 . . .	368·7	771	14·8	2,989·5	57·5	1,441 8	27·7	5,202·3	14·1
1934-35 . . .	374·0	933	16·2	3,392·6	58·0	1,434·5	24·9	5,760·1	15·4
1935-36 . . .	379·3	937	15·4	3,495·3	57·4	1,657·1	27·2	6,089·4	16·1
1936-37 . . .	384·6	753	13·1	3.553·7	61·9	1,445·5	25·0	5,752·2	14·9
1937-38 . . .	389·9	579	9·9	3,788·2	64·8	1,477·0	25·3	5,844·2	15·0
1938-39 . . .	395·2	631	9·5	4,130·4	61·8	1,945·9	28·9	6.707·3	16·9

APPENDIX XXIII.

Production per loom in 8 hours.

No.	Description.	Dimension.	Ends and picks per inch.	Counts of warp and weft.	Throw shuttle.	Fly-shuttle.
1	Cotton Khaddar . . .	27 ins. × 10 yds.	..	Hand-spun	10 yds.	..
2	Ditto	27 ins. × 10 yds.	..	12s × 10s	..	13 yards.
3	Ditto	27 ins. × 10 yds.	36 × 34	14s × 8s	..	16 ,,
4	Cotton grey cloth . . .	32 ins. × 24 yds.	32 × 28	10s × 12s	..	24 ,,
5	Ditto	32 ins. × 24 yds.	48 × 44	20s × 20s	..	10 to 12
6	Cotton grey dhotis . . .	44 ins. × 5 yds.	48 × 44	20s × 20s	..	15 yards.
7	Ditto . . .	54 ins. × 4 yds.	52 × 48	20s × 20s	3½ yds.	8 ,,
8	Cotton sari	54 ins. × 6 yds.	52 × 44	30s × 24s	..	7½ ,,
9	Cotton dhotis . . .	44 ins. × 5 yds.	52 × 48	30s × 30s	..	12 ,,
10	Cotton sari	48 ins. × 8 yds.	52 × 48	30s × 30s	3 yds.	6 ,,
11	Cotton dhoti	44 ins. × 5 yds.	60 × 56	40s × 40s	..	9 ,,
12	Cotton sari . . .	47 ins. × 7 yds.	60 × 60	40s × 40s	2½ yds.	5 ,,
13	Cotton dhotis . . .	44 ins. × 5 yds.	72 × 64	60s × 60s	..	7 ,,
14	Cotton sari	48 ins. × 9 yds.	72 × 68	60s × 60s	2 yds.	4 ,,
15	Ditto	48 ins. × 9 yds.	80 × 80	80s × 80s	1½ yds.	3½ ,,
16	Ditto	47 ins. × 7 yds.	96 × 96	100s × 100s	1½ yds.	2½ ,,
17	Art silk borekis . . .	..	..	150d × 120d	10 yds.	16 ,,
18	Silk Daryai	..	..	80/40d × 90/110d.	1½ yds.	..
19	Woollen blankets . . .	Hand-spun yarn		Warp and Weft.	8 yds.	..

APPENDIX XXIV.

Methods of Preparation of Yarn.

Bengal.—The yarn is first steeped in water and then the winding operation is carried on by the members of the weavers' family who also complete the process of sizing. In the majority of cases, the 'Heck and Creel' system in street-warping is followed. But in the villages laying out the warp by taking one bobbin at a time is a common practice. At Narisa (a village in Dacca District, Bengal), a Muslim girl of 12 years was seen preparing a warp for a sari containing 2940 ends of 10 yards. It meant that she would have to walk 2940 times 10 yards, or $\frac{2940 \times 10}{1760} = 16{\cdot}70$ miles, per day. She informed the Committee that she would earn only two annas as wages. When this amount is reduced in terms of mileage, it would appear that she would earn 1·435 pies by walking a mile while her hands had been continuously working. In the *karkhanas* and in urban areas, where open areas are not easily available, the improved method of warping by the mill or drum and the process of winding in a hand-power driven, winding machine have become prevalent. The speciality in Bengal is that the process of sizing precedes winding and warping in most cases. The cost of weaving including the winding, sizing, warping, beaming, drawing-in, and pirn-winding charges fixed per piece approximately amounts to from 8 to 12 annas per piece of dhoti or sari, 46" × 5½ yards of counts 60s to 90s. The cost of winding (warp) and sizing is about 3 annas and warping about 1½ annas per piece of dhoti or sari.

Bihar.—In Bihar, the system mostly followed is to wind the yarn from hanks to bamboo spools or swifts and then to lay out a warp by the street method of warping. The warp is then steeped in a mixture of water and starch and is stretched in the sun to dry. No hired labour is engaged. The improved process of warping, sizing and beaming which is now introduced is as follows:—(*a*) *For coarser counts up to 20s*: The yarn in hanks is steeped in water and then sized. These sized hanks when about 75 per cent. dry are wound on bobbins. About 60 to 100 bobbins are then placed in creel and wound on a drum of about 14" diameter to a length of 100 yards in section. These drums or sections serve as weavers' beams on handlooms. (*b*) *For finer counts*: The sized hanks instead of being wound on bobbins are wound on wooden reels while the yarn is still wet and dried in the sun. The dried yarn is then warped in sections on drums or weavers' beams as stated in (a) above. The following tables give comparative statements of costs of preparing the warp by the old and the new methods, the rates of wages per day being annas four for a weaver and annas two for his helper:—

Old method: (*street-sizing*).

Specifications of warp.	Assistant.		Weaver.		Total.	Cost per lbs.
	Winding.	Warping.	Sizing.	Drawing etc.		
10s, 25 yds., 1,000 ends, 3 lbs.	(3 hrs.) ¾ as.	(3 hrs) ¾ as.	(2 hrs.) 1 a.	(3 hrs.) 1½ as.	4 as.	1½ as.
20s, 25 yds., 2,000 ends 3½ lbs.	(7 hrs.) 2 as.	(1½ day) 3 as	(3 hrs.) 1½ as.	(1 day) 4 as.	10½ as.	3 as. 2 ps.

Improved method: (*hank-sizing*.)

10s, 100 yds., 1,000 ends, 12 lbs.	(Assistant) (1½ days) 3 as.	(Weaver) (3 hrs.) 1½ as.	(Weaver) (3 hrs.) 1½ as.	..	6 as.	½ a.
20s, 100 yds., 2,000 ends 13 lbs.	(3½ days) 6½ as.	(1 day) 4 as.	(1 day) 4 as.	..	14½ as.	1 a. 1 p.

N.B.—(i) The cost of sizing the hanks in the improved method has to be added.

(ii) The improved method saves the waste of time in stretching out the warp and in separating the warp threads while weaving since the warping drums replace the weaver's beam.

Bombay.—In Bombay the cost of preparation of yarn, winding, warping, sizing, and beaming, comes to about annas five to annas seven per sari of 45" × 8 yards—20s × 20s—36 × 48 inches. The old methods of winding on a charka and street warping and sizing are generally followed and the wages paid for winding and warping are at the rate of annas ten per bundle and the work is completed within 2 or 3 days. In certain centres, however, improved warping

mills have been installed and are taken advantage of by weavers. The warping mill makes a charge of annas four to annas five per bundle of 10 lbs. and completes the work in about 3 to 4 hours. With the owners of *karkhanas* in urban areas the warping mills are popular.

Central Provinces and Berar.—Except in some centres around Nagpur, the majority of centres carry on preparation by the members of the weaver's family by the old method (peg-warping). In the Nagpur district, however, a few warping drums are utilised for the warping purposes and warps are prepared by these men on payment of a small charge. The majority of the warp in most of the district does not exceed 15 yards in length.

Madras.—Mill warping has been accepted almost as a general rule in the urban areas and peg-warping is still followed for short warp and for artificial silk warp. In Madras, no yarn is sized before warping. The approximate cost of preparation of yarn of 60s counts is given below :—

	Quantity.	Hours.	Wages.
			Rs. a. p.
Winding (on bobbins, with winding wheels) .	100 hanks	10	0 1 8
Warping (with the aid of mill warper) . . .	300 ,,	10	0 4 6
Sizing (street sizing)	250 ,,	100	1 5 0
Twisting one warp	3,720 ends	..	0 3 0

Peg-warping board.—When it has to provide warp for one loom in the family the warping is carried out during leisure hours by members of the family. Warping mills have been taken up by a class of people in the villages where the weavers simply leave their yarn for being made into a warp. The same has been the case with sizing. There is a class who specialises in sizing only. *Karkhanas* and some of the yarn dealers are keeping a shed with the necessary appliances for mill warping. In the interior villages, however, the old system of laying out the warp (street warping) is still prevalent. In some villages, a separate area has been reserved with crude stone pillars for fixing up the warp known as 'Pavadi'.

Orissa.—No warping mill is used. The details of the cost of preparation for a warp of 50 yards of 40s. (4½ lbs.) are as follows :—

	Rs. a. p.
Winding and sizing by one woman 3½ days at 2 annas per day .	0 7 0
Warping for 1½ days for two men (street warpers) at 5 annas per day	0 7 6
Beaming for ½ day for 2 men at 5 annas per day . . .	0 5 0
Twisting by one man for half a day at 5 annas a day . .	0 2 6
Winding weft for one woman for 3½ days at 2 annas a day .	0 7 0
	1 13 0

This amounts to 6·45 annas per day.

Punjab.—The approximate cost of preparation in this Province is given below :—

			Annas.
Winding ½ to 8 lbs.	2 as. to 8 as.	per head per diem . . .	1 to 4
Warping ½ warp to 1 warp.	4 as. to 8 as.		1 to 2
Sizing (hand cotton alone) 50 lbs.	1 a. per lb.		2 to 4
Warp-sizing 1 to 3 warp	1 a. to 4 as. per lb.		2 to 5
Beaming, twisting, drawing in.	1 to 3 warp		2

Mill warping or winding machines have been adopted in factories only.

United Provinces.—Mill warping system though introduced by the Department of Industries has not been generally taken up by the weavers and therefore the mill warpers are more or less confined to factories. The system of preparation mostly followed is as follows :—

Counts 20s.	Wages.	Operatives.
Winding yarn by Charka, 10 to 12 knots per day.	3 as. per day of 10/12 hrs.	1
Warping (street warping) 5 to 6 knots per day.	3 annas per day	1
Whether (*a*) by taking two bobbins at a time 40 knots.	10 as. per bundle	2
or (*b*) Heck and creel system (street warping) 2 bundles.	Rs. 1-4-0	
Sizing (by street methods), 2 warps of 60 yards with 1,800 onds.	4 annas	3
Twisting for 400 ends	10 annas per day or 3 pies per 100 ends.	1
Drawing in, for 1,800 dents drawn in a dent	12 annas for two persons or 9 pies per 100 dents.	

APPENDIX XXV.

The Weavers' Castes.

South of the Vindhyas, the chief castes engaged in weaving are Salis (with various subsects), Devangas, Kaikolars, Koshtis, and Khatris. Sourashtras of South India form a category by themselves. There are besides various local castes, *e.g.*, Togatas and Kurnhina-Settis in Mysore, the Ceded Districts and Hyderabad, Koris, Caudas, Balahis, Mahars and Pankas in the Central Provinces, and Ranganis, Hansis, Gaudas, Patras, etc., in Orissa.

The Salis (Sanskrit *Salika*) are found all over the Madras Province, Hyderabad, and in parts of Bombay, Central Provinces and Berar, Orissa and Mysore. They are believed to have been the principal weavers of the Vijayanagar Empire and this perhaps explains their wide habitat. There are several sub-castes among them (Padma-Sali, Pattu-Sali, Suguna-Sali, Swakula-Sali, etc.). Among them Padmasalis are perhaps the most numerous; according to their own estimates, they number over a million. In the last century the Padmasalis of Hyderabad State migrated to the Bombay Deccan and parts of Central Provinces. They now form the majority of weavers in Sholapur, Ahmednagar and certain other Bombay centres. These emigrant Padmasalis showed great enterprise in introducing the fly-shuttle sleys and they are said to have been the first to start weaving *karkhanas* in that part of the country. Telugu is the traditional language of the Salis and even those who have settled down in Bombay and Berar stick to this language for home use.

The Devangas are also nearly as numerous and as widespread. They originally must have spoken Kanarese, but today they speak the language of the land they live in. They are found chiefly in the Madras Province, Mysore State, Bombay, Karnatak, and Orissa. Their chief weaving centres in Madras are Coimbatore, Salem, the Ceded Districts, and the Northern Circars. They are the principal weavers of Karnataka and they are numerous in Belgaum, Hubli, Dharwar, Ilkal, Rabkavi. They are called by diverse caste names, such as Setti, Sedan (Jedar), Sendan, Senian, Chettukaram, etc.

Kaikolars, also called Sengundas, are essentially a Tamil caste and are found all over the Tamil Districts of the Madras Province. It is believed that they number about 600,000. Their original home is believed to be Conjeevaram (the old Pallava capital). The community is divided into 75 *nads* and has an old established organisation. They usually call themselves Mudaliars (distinct from the Vellala Mudaliars); some of them also use the title Chetty. The Kaikolars are generally vegetarians and are noted for their frugal ways of living.

The Sourashtras, usually called Pattunulkarans, are spread over South India, their chief centres being Madura, Salem, Dindigul, Tinnevelly and Nagercoil (Travancore). They are the principal weavers of Madura. They are believed to have migrated from Kathiawar or Gujerat, and after some tarrying in the way, they settled down in Madura, some three hundred years ago. They are a very advanced people and their weaving business also stands on a rather high plane.

The principal weaving caste of the Maharashtra country is the Koshti. They are found in Bombay Province and States, Central Provinces and Berar, and Hyderabad. The most advanced section among them are those of Nagpur. Khatris are the leading weaving caste in Gujerat and in neighbouring States. Some of them have migrated into the Karnatak. They specialize in weaving silk.

The Tantis of Bengal have a long-established weaving tradition. Basaks, who form a section of them, are connected with the famous muslin industry of Dacca, and they seem to have risen to a high level of prosperity in the 18th century. The Tantis of Serampore were in active touch with the East India Company and they played a prominent part in the Company's trade at Calcutta and Hughli. The Tantis who got domiciled in Orissa are perhaps the least prosperous section of the community. The Naths are connected with Eastern Bengal and the Surma Valley of Assam; Comilla and Choumuhani were their great centres. A large number of them have abandoned weaving and have taken to agriculture.

The Momins (commonly called Jolahas) are the largest class of weavers in Northern India. Large numbers of them are found in Bengal, Bombay and Hyderabad also. During the famine of 1866-67 some of the Momins of the United Provinces migrated to Malegaon and other centres in East Khandesh. They are noted for their hard work and simplicity, and several stories are told of their industry. Besides Jolahas, there are other Musalman weavers like the Shaikhs of Baroda, the Lubbais of Tinnevelly in the Madras Province. The latter are a prosperous community of weavers.

As described in Chapter IV many caste weavers abandoned weaving and took to other occupations. While the weaving castes were being depleted, some other castes took up weaving. In Northern India, Mahomedans took up weaving in such large numbers that today they form the great majority of the weavers in most of the northern Provinces and States. According

to Taylor, when, owing to a large export demand, the cotton industry was flourishing in the 18th century, a certain number of Kayasthas in Bengal and similar castes elsewhere took up hand-weaving either as part-time or as full-time occupation and thus many of them have continued to pursue this occupation. Even after hand-weaving fell on evil days, the influx of outsiders did not cease, because although the industry was not prosperous it offered better chances than certain other more precarious occupations. Throughout the country there has been a growing unemployment in the last few decades, among the village artisans generally, and these classes resorted to weaving as the easiest alternative occupation. Agricultural labour also became unsteady owing to the break-up of the old system of tillage (*e.g.*, Pannai in South India), and this has influenced especially the labouring classes in taking weaving. In Malabar, where the influx of new blood is most noticeable, it was largely due to the disinclination on the part of the Salis to adjust themselves to changing conditions, and others more enterprising than they found their opportunity in this and got trained in the weaving *karkhanas* set up by the Basel Mission at Calicut, Cannanore and Mangalore. In some other places, the influx of new castes was due to the influence of the textile schools which imparted instruction in weaving to all irrespective of caste restrictions, and it has been found that in most parts of India the students of such schools are drawn mostly from non-weaving castes. In the South, the missionary bodies which conduct some of the schools have been drawing members of the depressed classes into weaving, and this change appealed to those people as it meant better earnings and a welcome rise in social status. It is, however, incorrect to suppose that the new entrants have all been of the backward or poorer classes. On the other hand, there is ample evidence to show that a fair proportion of them were of the upper classes including Brahmins and Kshatriyas.

In Madras, many Gounders, Vanniakula Kshatriyas, Pandarams, Padayachis, Lingayats, Moopanars, Naidus, Reddis and Vellalas have taken up weaving, mostly in the Central Districts. On the Malabar coast, the new entrants are mostly Thiyas, Ezhavas and Nadirs: a few Nairs and Indian Christians have also taken it up. In Bengal, not only agricultural castes like Mahisas but Kayasthas, Vaidyas and Brahmins have taken up hand-weaving. In the Punjab also there are to-day a good few high caste Hindu weavers. The great majority of these new entrants are, however, backward classes (scheduled castes). The Dheds of the Maharashtra country and the Kurubars of Mysore and Ceded Districts and the Adi-Dravidas of South India have always been doing spinning and some kind of rough weaving (blankets, etc.), but latterly they have taken more keenly to weaving, largely because agricultural employment has become more unsteady and irregular.

The entry of outsiders has, on the whole, benefited the handloom industry. For instance, the comparative success of the industry in Malabar and South Canara is due almost entirely to the new classes that took up weaving. Being free from the long-standing prejudices to which the weaving castes are subject, they were able to introduce improvements and they took readily to the *karkhana* system. The enterprising new-comers of Ichalkaranji have gone a step further, and by introducing the powerloom they have made that little town a busy hive of industry.

Caste Specialization.—Another interesting feature, noted in Chapter IV, is the specialization of castes in different types of cloth production. In the order of precedence for cloth, silk comes first, and then follows cotton, graded according to counts of yarn. Silk weaving has been largely in the hands of the Sourashtras in Southern India. Devangas are said to have also woven silk, and still some of them weave silk but they now handle mostly cotton of higher counts. Among Salis, Pattusalis wove silk; Padmasalis generally wove high and medium count cotton, but in some places they have come to weave mixed cotton and silk. Medium and lower counts of cotton yarn formed the sphere of the Kaikolars (Sengundars), and they shared with the Muslims in Southern India the weaving of dhotis and lungis. Adi-Andhra and Adi-Dravida weavers handled the lowest counts and made rough cloths. Such division of labour, however, has lately been falling into desuetude.

A similar specialization is also seen in individual centres where the different weaving castes dwell in adjacent wards. In Burhanpur, the Hindu weavers made silk border saris and Muslims specialised in phetas and pagris (turban cloth). In Salem, took up weaving in such large numbers that today they form the great majority of the weavers in most of the northern Provinces and States. According to Taylor, when, owing to a large export demand, the cotton industry was flourishing in the 18th century, a certain number of Kayasthas in Bengal and similar castes elsewhere took up hand-weaving either as part-time or as full-time occupation and thus many of them have continued to pursue this occupation. Even after hand-weaving fell on evil days, the influx of outsiders did not cease, because although the industry was not prosperous it offered better chances than certain other more precarious occupations. Throughout the country there has been a growing unemployment in the last few decades, among the village artisans generally, and these classes resorted to weaving as the easiest alternative occupation. Agricultural labour also became unsteady owing to the break-up of the old system of tillage (*e.g.*, Pannai in South India), and this has influenced especially the labouring classes in taking weaving. In Malabar, where the influx of new blood is most noticeable, it was largely due to the disinclination on the part of the Salis to adjust themselves to changing conditions, and others more enterprising than they found their opportunity in this and got trained in the weaving *karkhanas* set up by the Basel Mission at Calicut, Cannanore and Mangalore. In some other places, the influx of new castes was due to the influence of the textile schools

which imparted instruction in weaving to all irrespective of castes restrictions, and it has been found that in most parts of India the students of such schools are drawn mostly from non-weaving castes. In the South, the missionary bodies which conduct some of the schools have been drawing Sourashtras weave high class silk saris, Devangas and Salis coloured goods in cotton (saris, etc.), and the Kaikolars grey and bleached goods (dhotis, towels and dupattas). A similar scheme is also observable in Conjeevaram where also various castes occupy distinct localities in the town.

In this elaborate division of labour, there is a place also for those castes specialising in certain preparatory and connected processes. In Dhulia, the Muslims did sizing and the Hindus weaving. In certain large centres (*e.g.*, Surat, Salem, Madura) sizing is by itself an important industry and employs many workers. In some places sizing is done by people of the weaving caste ; elsewhere new entrants like Dheds (*e.g.*, in Baroda) do the sizing. In certain parts of Madras Province, there is a section of Muslims specialising in heald-knitting and reed making. Dyeing and bleaching are done by special classes of people in some places, and they were formerly more numerous. Thus the handloom weaving industry in this country is based on an integration of many castes, involving a great deal of specialization and co-operation.

APPENDIX XXVI.

Hand-spun Yarn.

Hand spinning in India has been a very ancient occupation and has provided employment to millions of spinners, whether working whole-time or part-time. The decay of hand-spinning in the 19th century probably involved the unemployment and consequent destitution of these spinners. Fortunately, some of them found an opportunity to turn to the weaving of mill-spun yarn which was available in larger and larger quantities and which it became sufficiently profitable to utilize. Thus, though, there is no doubt about the great volume of production of hand-spun yarn in former times, we are not sure that hand-spun yarn production is being carried on to any large extent at present. In recent years, owing to the impetus given by the Congress to hand-spinning in some directions, probably there has been an increase in the quantities produced; however, the general trend has been a declining one, so that we cannot claim that there is taking place any net increase in production from year to year. So far as the hand-spun yarn production under the auspices of the All-India Spinners' Association is concerned, the peak year has been the year of the non-cooperation movement, *viz.*, 1930-33 and since then there has been a decline. From all accounts, it appears that the new hand-spinning movement has touched only a small proportion of the spinners in the country.

Production of hand-spun yarn.—Mr. Arno Pearse in his *Cotton Industry of India*, quotes an estimate of 50 million spinning wheels in India, each producing 48 lbs. of yarn per annum. On the other hand, Messrs. Puntambekar and Varadachari in their *Hand-spinning and Hand-weaving*, put down the figure at 5 million wheels. Mr. M. P. Gandhi, in his book, *How to compete with Foreign Cloth*, regards 25 lbs. per annum as a moderate estimate for the outturn of yarn per wheel, but considers that 12 lbs. would be the lowest limit, in view of the fact that the spinning wheels were not working regularly. Accordingly, whereas Mr. Pearse's estimate would give an impossible total of 2,400 million lbs. of yarn (*i.e.*, nearly double the quantity produced by mills in India), Mr. Gandhi's estimate would be somewhere between 125 and 60 million lbs. Actually, Mr. Gandhi accepts the latter figure as a minimum proposition. The Tariff Board in their Report on the Cotton Textile Industry (1932) (paragraph 161) quote a Mysore Report on the progress of hand-spinning in the State as stating that 1,800 spinners produced nearly 37,000 lbs. in a year or about 20 lbs. per annum. They, therefore, accept 25 lbs. of yarn per annum (Mr. Gandhi's estimate) per weaver as correct. However, in their final estimate, they take the All-India Spinners' Association's average yarn production of 4·8 million lbs. per annum and multiply this by 5, on the assumption that the total production for the country was to the A. I. S. A. production as 5:1, which was the ratio for the Punjab. Thus, the Tariff Board arrived at an estimate of 24 million lbs. However as stated by us in Chapter V, paragraph 89, the Secretary of the All-India Spinners' Association has now given a ratio of 3: 1 as things stand at present, which leads us to a figure of 9·2 million lbs. only. It appears that both the Tariff Board's and the All-India Spinners' Association's figures are underestimates, in view of the detailed estimates of consumption of hand-spun yarn made below.

In Chapter V, (paragraph 89), we have given the figure 54·4 million lbs. as our estimate of the total yarn consumed in the handloom industry. This figure is based upon the Provincial and State estimates given in Table XLIII and has been independently checked by us. It appears to us that 54·4 million lbs. is a figure which is much nearer the truth than some of the earlier estimates. Of course, consumption of yarn by the handloom is not the same thing as its production. In fact, total production of yarn is bound to be somewhat greater; for there are several other minor uses for hand-spun yarn which must be taken into account. Hand-spun yarn is produced not only on *charkhas*, for which we have given an estimate in paragraph 89, but also on small *taklis* (spindles) by numberless beggars, for which no data of any kind are available. It will not, however, be incorrect to assume that in addition to the 60 million lbs. of hand-spun yarn produced on *charkhas*, another 10 per cent. is produced on *taklis*, making a total of 66 million lbs.

Consumption of hand-spun cotton yarn.—Quite a considerable quantity of hand-spun yarn is used for domestic purposes by all castes in India. For instance, the sacred thread is worn by the Brahmins, Kshatriyas, Vaishyas and many other castes like the Devangas and Sengunthe Mudaliar weavers, carpenters, *yogis*, Lingayaths, etc. On ceremonial occasions like marriage, *upanayana*, *annaprasana*, *sraddhas* and different pujas, a substantial quantity of hand-spun yarn is used by the Hindus. Hand-spun yarn is again very largely consumed by the people for purposes such as *mangalsutrams*, armlets, charms, *kavacha*, etc., round the neck, arms and waists. We make a rough estimate for these various categories on the bases of data obtained by us through enquiries in different Provinces: (*a*) *Sacred thread*: About ¼ oz. of cotton yarn of 9 yards consisting of 3 strands are twisted together in each thread, and on the average three such threads are used every year, by male persons belonging to castes permitted to wear sacred threads. This means that each wearer uses 1 oz. per annum. Total Brahmin males

according to the Census of 1931 were 8·02 millions. We deduct 25 per cent. from this figure for boys up to 10 years, arriving at 6 million Brahmin wearers. We assume that 80 per cent. of these wear sacred threads. Hence the total consumption of Brahmin wearers comes to 3 millions. Among "inferior castes," who may be assumed to be wearing threads, there are 85·6 million males. Deducting 25 per cent. for boys under 10, we arrive at a figure of 64·2 millions for these castes. We assume that 25 per cent. of these, *i.e.*, 16 millions actually wear the sacred thread, which gives a consumption of 1 million lbs. Thus the total consumption on account of the sacred thread may be said to amount to 1·3 million lbs. (*b*) Hand-spun yarn is used on ceremonial occasions such as marriages, *upanayana*, *sraddha*, *puja*, *sravani*, etc. Nearly 1 oz. per head can be said to be the consumption. Under this we assume a further consumption of equal amount for the 22 million Brahmins and non-Brahmins using threads, on this account. This gives another 1·3 million lbs. (*c*) A large quantity of hand-spun yarn is used for *mangalsutrams* by Hindu women, and for *kavachas*, armlets, and charms by Hindu and Muslim alike. The average *per capita* consumption is reported to be 2 oz. per wearer and we assume that 10 per cent. of the total population is still keeping up the peculiarity. This gives us about 3·6 million lbs. for the present population. (*d*) We further assume that another 4 million lbs. of hand-spun yarn is used for sundry domestic purposes. Thus the total consumption on account of the above 4 categories amounts to 1·3+1·3+3·6+4·0=10·2 million lbs. If we add our own estimate of 54·4 million lbs. of the yarn consumed by the handloom industry to this figure, it would appear that the total consumption under all heads would come to 64·6 million lbs. This figure is not far from the estimated total production of hand-spun yarn of 66 million lbs.

The cost of hand-spun yarn.—The following table has been extracted from a book entitled "Elementary Guide to Hand-spinning" by Mr. Dilkush B. Divanji, published by the Ville Parle Khadi Mandir in June 1941. The table gives an approximate idea of the cost of hand-spun yarn. A comparison of the price per lb. of hand-spun yarn with that of mill-spun yarn will show that the former is nearly 3 to 4 times the latter.

TABLE XLIX.—*Cost of hand-spun yarn per lb. fixed by Gujerat Charkha Sangha.*

Counts.	Cost of 1 lb. of cotton sliver.	Labour charges for hand-spinning.	Total hand-spun yarn cost per lb.
1	2	3	4
	Rs. A. P.	Rs. A. P.	Rs. A. P.
6s	0 8 0	0 4 0	0 12 0
8s	0 8 0	0 5 6	0 13 6
10s	0 8 0	0 7 0	0 15 0
12s	0 8 0	0 9 0	1 1 0
14s	0 8 0	0 11 0	1 3 0
16s	0 10 0	0 13 0	1 7 0
18s	0 10 0	0 15 0	1 9 0
20s	0 10 0	1 1 6	1 11 6
22s	0 10 0	1 4 0	1 14 0
24s	0 10 0	1 6 6	2 0 6
26s	0 10 0	1 9 9	2 3 9
28s	0 10 0	1 12 0	2 6 0
30s	0 10 0	1 15 0	2 9 0
32s	0 10 0	2 2 0	2 12 0
34s	0 10 0	2 5 6	2 15 6
36s	0 10 0	2 9 0	3 3 0
38s	0 10 0	2 12 6	3 6 6
40s	0 10 0	3 0 0	3 10 0

N.B.—While working out the cost of cotton sliver, allowance is made for loss in carding and spinning in the above table.

The average production of hand-spun yarn of 12s, as given by Mr. Narayana Murti of the Andhra branch of the A. I. S. A. is 3 hanks per day of 8 hours per spinner. It is said that one sq. yard of khadi cloth of 12s would require 4 hanks and the daily output of a loom is 6 sq. yards. In other words, 24 hanks of 12s would be necessary for a day's consumption per loom or 8 spinners are required per loom

APPENDIX XXVII.

Number of Looms and Weavers according to Districts and Centres.

NOTE 1.—The totals of the district figures do not in all cases agree with the Provincial figure because revised figures have been given for some Provinces while for some others the district figures refer to some previous dates.

NOTE 2.—The figures for the centres in Madras refer to cotton looms only.

Province or State District and Centre.	Number of looms.	Number of weavers.
ASSAM PROVINCE—		
Goalpara District	48,586	48,586
Kamrup District	120,564	120,564
Darrang District	42,424	42,424
Nowgong District	47,353	47,353
Sibsagar District	68,808	68,808
Lakhimpur District	29,832	29,832
Garo Hills District	6,100	6,100
Cachar District	11,759	11,759
Sylhet District	7,185	7,185
Khasi and Jaintia Hills District	4,211	4,211
Naga Hills District	32,974	32,974
Lushai Hills District	225	225
BENGAL PROVINCE—		
Dacca Division	33,186	75,128
Mymensingh District	8,892	22,905
Dacca District	12,946	36,491
Faridpur District	6,203	9,966
Bakarganj District	5,145	5,766
Chittagong Division—		
Tippera District	8,527	13,233
Noakhali District	7,199	8,196
Chittagong District	7,404	3,683
Rajshahi Division—		
Bogra District	1,243	2,203
Darjeeling District	170	354

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
BENGAL PROVINCE—*contd.*		
Rajshahi Division—contd.		
Dinajpur District	7,737	10,290
Jalpaiguri District	1,216	555
Malda District	1,568	867
Pabna District	6,663	3,241
Rangpur District	695	2,150
Rajshahi District	..	2,542
Burdwan Division	31,594	36,161
Burdwan District	3,432	2,861
Birbhum District	3,649	5,527
Bankura District	6,142	7,037
Midnapore District	8,647	9,342
Hooghly District	5,879	9,769
Howrah District	3,845	1,625
Presidency Division	19,009	28,012
24-Parganas	1,461	7,144
Calcutta District	..	..
Nadia District	3,654	9,996
Murshidabad District	5,618	4,409
Jessore District	5,357	4,092
Khulna District	2,919	2,371
BIHAR PROVINCE—		
Patna District	2,587	2,482
Gaya District	6,869	6,832
Shahabad District	3,703	3,691
Saran District	2,029	2,023
Champaran District	705	705
Muzaffarpur District	3,368	3,402
Darbhanga District	7,345	7,343
Bhagalpur District	5,985	5,975

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
BIHAR PROVINCE—*contd.*		
Monghyr District	2,454	2,433
Purnea District	2,634	2,717
Santal Parganas District	14,988	12,025
Hazaribagh District	6,455	6,454
Ranchi District	12,026	12,099
Palamau District	3,057	3,077
Manbhum District	9,188	8,169
Singhbhum District	4,818	1,410
BOMBAY PROVINCE—		
East Khandesh District	4,600	..
Nashirabad	800	..
Satara District	2,100	..
Ahmednagar District	7,500	..
Ahmednagar	2,500	..
Pathardi	600	..
Sholapur District	14,500	..
Sholapur	7,000	..
Nasik District	9,500	..
Malegaon	4,000	..
Yeola	2,000	..
Poona District	4,500	..
Poona	1,500	..
West Khandesh District	2,000	..
Bijapur District	18,000	..
Guledgud	4,000	..
Bagalkot	500	..
Ilkal	3,000	..
Kanara District	750	..
Ratnagiri District	900	..

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
BOMBAY PROVINCE—*contd.*		
Kolaba District	150	..
Belgaum District	7,500	..
Belgaum	800	..
Gokak	800	..
Dharwar District	16,500	..
Gadag	3,000	..
Hubli	3,500	..
Ranibennur	2,000	..
Broach and Panch Mahals Districts	500	..
Broach	400	..
Thana District	2,200	..
Bhivandi	500	.
Kaira District	2,000	..
Ahmedabad District	3,500	..
Ahmedabad	750	..
Dholka	500	..
Surat District	4,500	..
Surat	700	..
CENTRAL PROVINCES AND BERAR—		
Nagpur District	13,587	13,587
Nagpur	5,156	..
Khapa	829	..
Kamptee	831	..
Umrer	1,795	..
Bhiwapur	458	..
Wardha District	837	837
Chanda District	7,903	7,903
Chanda	1,043	..
Armori	426	..

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
CENTRAL PROVINCES AND BERAR—*contd.*		
Chhindwaree District	6,766	6,766
Bhandara District	5,774	5,774
Betul District	1,888	1,888
Jubbulpore District	799	799
Saugor District	2,129	2,129
Mandla District	1,958	1,958
Hoshangabad District	2,238	2,238
Nimar District	1,548	1,548
Burhanpur	1,276	..
Raipur District	8,116	8,116
Bilaspur District	6,112	6,112
Drug District	4,657	4,657
Balaghat District	4,370	4,370
Amraoti District	2,002	2,002
Ellichpur	989	..
Akola District	669	669
Yeotmal District	809	809
Buldana District	1,176	1,176
MADRAS PROVINCE—		
Visagapatam District	15,803	..
Ponduru	220	..
Nellimarlu	313	..
East Godavari District	13,017	..
Rajahmundry	400	..
Mori	610	..
Peddapuram	1,800	..
Uppada	2,000	..
West Godavari District	4,833	..
Ellore	2,000	..

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
MADRAS PROVINCE—*contd.*		
Velpuru	555	..
Kistna District	5,892	..
Pedana	1,500	..
Masulipatam	400	..
Guntur District	20,002	..
Chirala	1,300	..
Perala	1,200	..
Vetapalem	1,000	..
Pandillapalli	510	..
Mangalagiri	2,000	..
Nellore District	11,691	..
Cuddapah District	11,898	..
Dommaranandyala	587	..
Jammalamadugu	2,510	..
Prodattur	1,500	..
Pullampet	1,000	..
Kurnool District	12,686	..
Kodumuru	2,000	..
Bellary District	13,500	..
Adoni	7,280	..
Kosigi	1,112	..
Yemmigannur	1,388	..
Anantapur District	10,687	..
Tadpatri	1,000	..
Uravakonda	2,100	..
Madras District	1,791	..
Chingleput District	16,600	..
Saidapet	3,000	..
Arni	1,500	..

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
MADRAS PROVINCE—*contd.*		
Conjeevaram	2,500	..
Chittoor District	7,853	..
Narayanavaram	1,310	..
Kalahasti	900	..
Podathurpeta	900	..
North Arcot District	23,334	..
Gudiyattam	8,050	..
Panapakkam	1,410	..
Salem District	36,540	..
Tiruchengode	1,600	..
Kumarapalayam	1,300	..
Rasipuram	2,400	..
Namakkal	460	..
Salem	6,835	..
Coimbatore District	23,415	..
Bhavani	2,800	..
Coimbatore	2,840	..
Kavandapadi	5,000	..
South Arcot District	11,028	..
Chinnasalem	400	..
Tanjore District	10,161	..
Trichinopoly District	8,407	..
Jayankondam	10,000	..
Madura District	7,722	..
Madura	6,580	..
Ramnad District	18,167	..
Arupukottai	12,000	..
Paramakudi	3,000	..

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
MADRAS PROVINCE—*concld.*		
Tinnevelly District	17,013	..
Tenkasi	2,450	..
Ambasamudram	1,400	..
Melapalayam	4,500	..
Kalladaikurchi	1,050	..
Malabar District	14,857	..
Cherakkal (Taluk) including Cannanore town	10,000	..
Calicut	546	..
South Kanara District	2,586	..
ORISSA PROVINCE—		
Cuttack District	13,887	49,468
Puri District	4,096	12,540
Balasore District	5,509	33,417
Sambalpur District	12,530	41,629
Ganjam District	7,660	18,756
Koraput District	6,625	12,830
PUNJAB PROVINCE—		
Hissar District	3,673	3,746
Rohtak District	3,658	3,795
Gurgaon District	2,700	2,636
Karnal District	3,059	3,419
Ambala District	6,262	6,822
Simla District	71	95
Kangra District	4,692	5,243
Hoshiarpur District	13,954	14,614
Jullundur District	11,347	12,589
Ludhiana	5,910	6,716
Ferozepore District	6,095	6,573
Lahore District	6,507	6,868

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
PUNJAB PROVINCE—*contd.*		
Amritsar District	8,714	11,141
Gurdaspur District	8,922	9,062
Sialkot District	10,296	10,666
Gujranwala District	6,434	6,532
Sheikhupura District	4,480	4,725
Gujrat District	8,366	8,549
Shahpur District	6,828	7,031
Jhelum District	4,845	5,058
Rawalpindi District	2,969	3,063
Attock District	6,929	7,379
Mianwali District	2,715	2,932
Montgomery District	5,249	8,479
Lyallpur District	7,043	7,160
Jhang District	7,974	6,162
Multan District	8,935	11,086
Muzaffargarh District	4,846	4,928
Dera Ghazi Khan District	2,912	2,958
IND PROVINCE—		
Hyderabad District	1,050	1,362
Hala	500	600
Nasarpur	300	400
Karachi District	357	395
Karachi	300	337
Sukkur District	1,315	1,705
Lakhi	300	360
Pir-jo-goth	400	390
Larkana District	75	77
Tharparkar District	997	997
Dadu District	25	29

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
SIND PROVINCE—*contd.*		
Upper Sind Frontier District	4	4
Nawabshah District	..	..
UNITED PROVINCES—		
Rohilkhand Division—		
Bareilly District	3,681	13,591
Budaun District	4,075	15,999
Shahjehanpur District	2,788	8,968
Bijnor District	9,668	32,687
Moradabad District	9,380	33,866
Pilibhit	1,483	4,121
Allahabad Division—		
Farukhabad District	2,000	6,978
Etawah District	2,368	9,114
Cawnpore District	3,351	9,129
Fatehpur District	1,175	3,245
Allahabad District	2,380	9,482
Kumaun Division—		
Nainital District	361	1,717
Almora District	396	1,304
Garhwal District	262	778
Meerut Division—		
Dehra Dun District	80	276
Saharanpur District	4,500	17,981
Muzaffernagar District	4,682	18,307
Meerut District	6,478	22,972
Bulandshahr District	6,877	21,638
Agra Division—		
Aligarh District	5,281	15,869
Agra District	4,924	16,952

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
UNITED PROVINCES—*contd.*		
Agra Division—contd.		
Muttra District	1,870	5,593
Mainpuri District	1,720	6,536
Etah District	2,306	8,586
Benares Division—		
Benares District	55,475	168,658
Benares City	25,000	
Mirzapur District	17,465	70,562
Jaunpur District	1,841	5,955
Ghazipur District	2,966	6,927
Ballia District	1,380	3,351
Gorakhpur Division—		
Gorakhpur District	1,841	5,955
Basti District	3,061	9,022
Azamgarh District	14,225	39,890
Fyzabad Division—		
Fyzabad District	5,703	28,688
Gonda District	962	2,928
Bahraich District	136	776
Sultanpur District	1,052	2,262
Partapgarh District	2,317	8,317
Barabanki District	5,689	23,628
Jhansi Division—		
Banda District	3,198	8,626
Hamirpur District	2,356	6,656
Jhansi District	7,450	16,111
Jalaun District	6,218	15,830
Lucknow Division—		
Lucknow District	473	1,089
Unao District	1,403	3,059

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
UNITED PROVINCES—*concld.*		
Lucknow Division—contd.		
Rai Bareli District	1,105	5,017
Sitapur District	5,710	15,741
Hardoi District	2,947	6,956
Lakhimpur District	1,558	4,181
BARODA STATE	10,219	5,460
Patan	627	..
Amreli	110	..
Gandevi	475	..
Novasari	332	..
COCHIN STATE	3,158	..
Kuthampilly	800	..
Chittoor	1,240	..
Tathamangalam		
GWALIOR STATE	6,000	5,824
HYDERABAD (DECCAN) STATE—		
Atraf-i-balda District	8,000	..
Warangal District	5,200	..
Karimnagar District	20,200	..
Adilabad District	5,000	..
Medak District	12,500	..
Nizamabad District	5,900	..
Mahbubanagar District	9,000	..
Nalgonda District	11,700	..
Aurangabad District	1,700	..
Bir District	1,600	..
Nander District	2,600	..
Parbhani District	2,200	..
Gulberga District	12,900	..
Osmanabad District	800	..

APPENDIX XXVII—*contd.*

Number of Looms and Weavers according to Districts and Centres—contd.

Province or State District and Centre.	Number of looms.	Number of weavers.
HYDERABAD (DECCAN) STATE—*contd.*		
Raichur District	8,100	..
Bidar District	3,700	..
INDORE STATE	1,002	1,565
Maheshwar	257	475
Sunel	275	..
JAMMU AND KASHMIR STATE—		
Anantnag District	5,500	5,500
Baramulla District	3,500	3,500
Muzefferabad District	3,000	3,000
Jammu District	2,577	2,200
Udhampur District	3,118	2,600
Kathua District	2,169	1,800
Mirpur District	2,244	1,944
Reasi District	1,472	..
KOLHAPUR AND DECCAN STATES	14,995	12,891
Kolhapur	1,200	2,500
Ramdurg	3,900	2,500
Mudhol	1,800	1,800
Janjira	70	105
Jamkhandi	4,108	4,041
Savanar	142	11
Sangli	1,850	2,829
Ichalkaranji	293	1,428
Miraj (Senior)	1,000	1,200
Phaltan	137	137
Bhor	22	20
Akalkot	575	575
Aundh	376	500
Jath	22	60

APPENDIX XXVII—*concld.*

Number of Looms and Weavers according to Districts and Centres—concld.

Province or State District and Centre.	Number of looms.	Number of weavers.
MYSORE STATE—		
Bangalore District	9,630	9,630
Mandya District	3,600	3,600
Mysore District	2,850	2,850
Hassan District	3,100	3,100
Kadur District	320	320
Shimoga District	300	300
Chitaldrug District	5,700	5,700
Tumkur District	5,750	5,750
Kolar District	3,750	3,750
TRAVANCORE STATE	19,000	19,000
Trivandrum Division	15,500	15,500
Quilon Division	2,000	2,000
Kottayam Division	1,500	1,500

APPENDIX XXVIII.

Cost of production of Handloom fabrics.

APPENDIX

Cost of production of

(Based upon material supplied in Table

Province or State. 1	Article. 2	Dimensions. 3	Counts of warp and weft. 4	Weight. 5
Central Provinces and Berar .	Plain Chaddar . .	30″ × 7½ yds.	8½s × 8½s	2 lbs. 7½ oz.
Madras	Kailis	29″ × 40″ (8 bits).	9½s × 13½s	1 lb. 8 oz.
Ditto	Real Madras Handkerchief	36″ × 36″ (8 bits).	9½s × 19s	1 lb. 14 oz.
Punjab	Khaddar . . .	27″ × 20 yds.	10½s × 10½s	5 lbs.
Gwalior	Dogha	29″ × 12 yds.	10s × 10½s	3 lbs.
Madras	Saram	44″ × 40″ (8 bits).	12½s × 20s	1 lb. 14 oz.
Bombay	Bijapur sari . . .	42″ × 7 yds.	20s × 20s ½	2 lbs.
Ditto	Belgaum sari . . .	42″ × 6½ yds.	20s × 20s	11 lbs. 15 oz
Madras	Towels	27″ × 54″	20s × 20s	6 oz.
Ditto	Saris (art. silk and cotton)	45″ × 8 yds.	20s × 24s	2 lbs.
Baroda	Kholia (used for beds) .	42″ × 18 yds.	20s × 20s	8 lbs.
Mysore	Sari (cotton and art. silk) .	40″ × 8 yds.	20s × 20s	06 tolas.
Savanur	Sari	45″ × 8 yds.	20s × 20s	4 lbs.
Assam	Check Table cloth . .	48″ × 48″	2/20s × 2/20s	12 lbs.
Ditto	Screen	48″ × 1 yd.	2/20s × 2/20s	6 lbs.
Ditto	Check shirting . .	34″ × 1 yd.	2/20s × 2/20s	5½ oz.
Central Provinces and Berar .	Purdah . . .	54″ × 7½ ft.	20½s × 20½s	1 lb. 8 oz.
Punjab	Curtain cloth . .	36″ × 1½ yds.	20½s × 20½s	6½ oz.
Central Provinces and Berar .	Lungi (check) . . .	43″ × 2½ yds.	24s × 24s	7 oz.
Bombay	Malegaon sari . .	43″ × 8 yds.	24s × 16s	1 lb. 7 oz.
Ichalkaranji . . .	Sari	50″ × 9 yds.	25s × 25s	1¼ lbs.
Bombay	Nagari Sari . . .	42″ × 7½ yds.	40s × 20s	1½ lbs.
United Provinces . .	Shirtings . . .	35″ × 12 yds.	30s × 40s	2 lbs. 8 oz.
Baroda	Dhoti (silk border) . .	45″ × 25 yds.	30s × 40s	5 lbs.
Mysore	Dhoti	52″ × 4 yds.	30s × 30s	36 tolas.
Bombay	Khans	30″ × 21 yds.	32s × 32s	3½ lbs.
Bengal	Sari	45″ × 5 yds.	40s × 40s	14 oz.
Ditto	Lungi	44″ × 2½ yds.	40s × 40s	4 oz.
Central Provinces and Berar .	Mercerised and art. silk sari	50″ × 8½ yds.	40s × 40s 2/84 art. silk.	1 lb. 7 oz.
Ditto . . .	Plain border sari . .	39″ × 8 yds.	40s × 40s	15 oz.
Madras	Cotton sari . . .	45″ × 8 yds.	40s × 40s	8 lbs.
Ditto	Shirtings . . .	54″ × 12 yds.	40s × 40s	2½ lbs.
Ditto	Angavastrams . .	36″ × 20 yds.	40s × 28s	24 lbs.

XXVIII.

Handloom fabrics.

III-D in the replies to questionnaire.)

Total cost of production (in annas).		Cost of material (in annas).		Cost of labour (in annas).		Percentage cost of	
Per piece.	Per lb. of cloth.	Per piece.	Per lb. of cotton.	Per piece.	Per lb. of cloth.	Material.	Labour.
6	7	8	9	10	11	12	13
19	7·6	14	5·6	5	2	74	26
48	32	24	16	24	16	50	50
46	24·2	22	11·6	24	12·6	48	52
47·5	9·5	28·5	5·7	19	3·8	59	41
33·5	11·2	22·5	7·5	11	3·7	67	33
80	42·7	50	26·7	30	16	63	37
39	19·5	24	12	15	7·5	62	38
38	19·6	21	10·8	17	8·8	55	45
4·75	12·5	2	5·3	2·75	7·2	41	59
30	15	18	9	12	6	60	40
124	15·5	92	11·5	32	4	74	26
42·25	17·6	30	12·5	12·25	5·1	71	29
44	11	22	5·5	22	5·5	50	50
23·5	31·13	9·5	12·6	14	18·7	40	60
14	37·8	5	13·5	9	24·3	36	64
14	41·2	5	14·7	9	26·5	36	64
36	24	12	8	24	16	33	67
10·75	26·2	4·5	11	6·25	15·2	42	58
7	16	3·25	7·4	3·75	8·6	46	54
26	18	12	8·3	14	9·7	46	54
67·75	54·2	48	30·4	19·75	15·8	71	29
30	24	19	15·2	11	8·8	63	37
48	19·2	40	16	8	3·2	83	17
200	40	1·60	32	40	8	80	20
19·75	21·9	14	15·5	5·75	6·4	70	30
96	29·5	51	15·7	45	13·8	53	47
21	24	14	16	7	8	67	33
12	48	10	40	2	8	83	17
48	33·4	25	17·4	23	16	52	48
42	44·8	23	24·5	19	20·3	55	45
48	16	32	10·7	16	5·3	67	33
50	20	34	13·6	16	8·4	68	32
128	5·3	80	3·3	48	2	63	37

APPENDIX

Cost of proauction of

Province or State.	Article.	Dimensions.	Counts of warp and weft.	Weight.
1	2	3	4	5
Orissa	Dhoti	45″ × 6½ yds.	40s × 40s	1 lb. 2 oz.
Sind	Susi	23″ × 18 yds.	40s × 40s	3 lbs.
Orissa	Dhoti (figure borders)	41″ × 5½ yds.	2/40s × 14s	1 1/16 lbs.
Punjab	Kamli	54″ × 3 yds.	42/2s × 20½s	1 lb.
Bombay	Ilkal sari	44″ × 8 yds.	60s × 60s	1 lb. 1 oz.
Central Provinces and Berar	Sari	48″ × 9 yds.	60s × 60s	14 oz.
Madras	Do.	40″ × 9 yds.	60s × 40s	5 lbs.
Ditto	Dhoti	54″ × 4 yds.	60s × 60s	¾ lbs.
Orissa	Sari (fancy Madras pattern border).	46″ × 5 yds.	60s × 60s	11 oz.
Central Provinces and Berar	Dhoti	50″ × 5 yds.	62s × 52s	14 oz.
Punjab	Shirting	27″ × 24 yds.	60/2s × 60/2s	4½ lbs.
Central Provinces and Berar	Dhoti	52″ × 5½ yds.	70s × 70s	10 oz.
Ditto	Sari	45″ × 5½ yds.	70s × 70s	9 oz.
Bengal	Sari (golden jari border)	48″ × 5½ yds.	80s × 80s	1¼ lbs.
Ditto	Sari (Resam border)	48″ × 5½ yds.	80s × 80s	1 lb.
Central Provinces and Berar	Dhoti	53″ × 5 yds.	80s × 80s	10 oz.
Ditto	Jari Kiner Uparna	50″ × 2½ yds.	80s × 80s	5½ oz.
Ditto	Dhoti	53″ × 5 yds.	80s × 80s	10½ oz.
Madras	Sari	45″ × 9 yds.	80s × 80s	1 lb. 4 tolas.
Ditto	Coloured sari	45″ × 9 yds.	80s × 80s	1¼ lbs.
Ditto	Angavastrams	45″ × 2½ yds.	100s × 100s	44 lbs.
Gwalior	Safa	35″ × 9 yds.	100s × 100s	11 oz.
Bengal	Dhoti	48″ × 5½ yds.	120s × 110s	¾ lbs.
Gwalior	Lugda	56″ × 9½ yds.	140s × 140s	12 oz.
Ditto	Do.	55″ × 9½ yds.	160s × 160s	15 oz.

The average percentage cost for material		60·1
The average percentage cost for labour		39·9
The average labour cost per pound of handloom cloth	20s	6·3 annas
	30s	6·6 ,,
	40s	9·7 ,,
	60s	26·7 ,,
	80s	40·2 ,,

XXVIII—*contd.*

Handloom fabrics—contd.

Total cost of production (in annas).		Cost of material (in annas).		Cost of labour (in annas).		Percentage cost of	
Per piece.	Per lb. of cloth.	Per piece.	Per lb. of cotton.	Per piece.	Per lb. of cloth.	Material.	Labour.
6	7	8	9	10	11	12	13
26·75	23	14	11·7	12·75	11·3	52	48
76	25·3	46	15·3	30	10	61	39
26	20	15·75	12·1	10·25	7·9	61	39
22	22	15·25	15·25	6·75	69·75	69	31
74	69·8	44	41·6	30	28·2	59	41
60	68·6	28	32	32	36·6	47	53
184	36·8	96	19·2	86	17·6	52	48
1	47	16	24·3	15	22·7	52	48
35·5	51·5	15·75	22·7	19·75	28·6	44	56
36	41·2	26	29·7	10	11·4	72	28
204	45·3	108	24	96	21·3	53	47
36	57·6	19	30·4	17	27·2	53	47
40	71·1	19·5	34·7	20·5	36·4	49	51
168·5	134·8	Yarn 32 Jari 80 112	89·6	56·5	45·2	67	33
48	48	24	24	24	24	50	50
72	115·2	46	73·6	26	41·6	64	46
28	85·3	20	60·9	8	24·4	71	29
88	134·1	56	85·3	32	48·8	64	36
102	92·7	36	32·7	66	60	35	65
102	81·6	55	44	47	37·6	54	46
37·5	85·2	22	50	15·5	35·2	59	41
160	232·7	136	197·8	24	34·9	85	15
76	101·3	Yarn 24 Jari 4 28	37·3	48	64	37	63
397	529·3	269	358·7	128	170·7	68	32
620	661·3	396	422·4	224	238·9	64	36

Cost of weaving per pound of mill cloth on 30th June 1941 obtained from two mills are as follows :—

	(1)	(2)
20s × 30s	5·56 annas	5·5 annas
37s × 36s (sari with a coloured weft)	9·00 ,,	..
37s × 52s (grey goods)	8·50 ,,	..
37s × 60s (3½ jacquard border)	12·25 ,,	..
40s × 35s	..	7·5 annas
40s × 40s	6·27 annas	..
60s × 80s	..	13·0 annas

APPENDIX XXIX.

Table showing Handloom goods under competition from Mill products.

Description.	Handloom.	Mill.
MADRAS.		
1. Grey shirtings. (Yemmiganur Weavers' Co-operative Sale Society).	44″ × 12 yards. Warp—10⅛s Weft—10⅛s. Ends per inch 32. Picks per inch 32. Price per yd. 3¼ annas. Date of sale 10th May 1941.	35″ × 40 yards. Warp—20s. Weft—20s. Ends per inch 36. Picks per inch 36. Price per yd. 3¼ annas. Date of sale 10th May 1941.
2. Ditto	....	33″ × 24 yards. Warp—10⅛s. Weft—10⅛s. Ends per inch 36. Picks per inch 36. Price per yd. 3¼ as. Date of sale 10th May 1941.
3. Dhoti (Puthur)	50″ × 52″ × ⅜ yds. ⅝″ dobby border. Warp—40s. Weft—40s. Ends per inch 60. Picks per inch 64. Price per yd. 4¼ as. Date of sale 9th June 1941.	48″ × ⅜ yards. (*Ahmedabad Mills.*) Warp—40s. Weft—46s. Ends per inch 64. Picks per inch 48. Price per yd. 4 as. Date of sale 9th June 1941. ⅝″ dobby border.
4. Coloured sari (Venkatagiri).	46″ × 6 yards. 1½″ plain border. Warp—60s. Weft—60s. Ends per inch 70. Picks per inch 74. Price per piece 58 as. Date of sale 5th September 1941.	46″ × 6 yards. (*Maflal Mills, Navsari.*) 1½″ plain border. Warp—60s. Weft—72s. Ends per inch 70. Picks per inch 52. Price per piece 46 as. Date of sale 5th September 1941.
5. Sari (Venkatagiri)	43″ × 7 yds. (grey). Warp—60s. Weft—60s. Ends per inch 60. Picks per inch 64. Price per piece 48 as. Date of sale 5th September 1941.	45″ × 7 yds., bleached. (*Maflal Fine Mills, Navsari.*) Warp—60s. Weft—60s. Ends per inch 58. Picks per inch 48. Price per piece 46 as. Date of sale 5th September 1941.
6. Gada piece (grey) (Yemmiganur).	44″ × 12 yards. Warp—10⅛s. Weft—10⅛s. Ends per inch 40. Picks per inch 32. Price per yd. 3⅛ as. Date of sale 30th May 1941.	33″ × 24 yards. (*Narasingee Mills, Sholapur.*) Warp—10⅛s. Weft—10⅛s. Ends per inch 38. Picks per inch 36. Price per yd. 3¼ as. Date of sale 30th May 1941.

APPENDIX XXIX—*contd.*

Table showing Handloom goods under competition from Mill products—contd.

Description.	Handloom.	Mill.
MADRAS—*contd.*		
7. Thorthu (Thaliparamba)	30″×58″. Warp—2/20s. Weft—2/20s. Ends per inch 29. Picks per inch 24. Price per piece 4½ as. Date of sale 9th June 1941.	33″×58″. (*A. D. Cotton Mills, Quilon.*) Warp—2/21s. Weft—2/21s. Ends per inch 29. Picks per inch 16. Price per piece 0-3-11. Date of sale 9th June 1941.
8. Dhoti (Kalladakurichi)	50″×2/4 yards. Warp—26s. Weft—26s. Ends per inch 56. Picks per inch 48. Price per yd. 4 as. Date of sale 4th March 1941.	46″×2/4 yards. (*Gadag Mills.*) Warp—28s. Weft—28s. Ends per inch 52. Picks per inch 48. Price per yd. 2½ as. Date of sale 4th March 1941.
9. Dhotis	48″×2/4 yards. Warp—20s. Weft—20s. Ends per inch 48. Picks per inch 40. Price per yd. 5 as. Date of sale 4th March 1941.	48″×2/4 yards. (*Coimbatore Mills.*) Warp—18s. Weft—20s. Ends per inch 44. Picks per inch 40. Price per yd. 0-4-10. Date of sale 4th March 1941.
10. Dhotis (Narayanavaram)	51″×4 yards. Warp—60s. Weft—60s. Ends per inch 76. Picks per inch 64. Price per piece 31 as. Date of sale 5th September 1941.	48″×4 yards. (*Ahmedabad Mills, Navsari.*) Warp—60s. Weft—40s. Ends per inch 66. Picks per inch 50. Price per piece 23 as. Date of sale 5th September 1941.
11. Dhotis (Kalladakurichi)	52″×2/4 yards. Warp—26s. Weft—26s. Ends per inch 56. Picks per inch 44. Price per yd. 5 as. Date of sale 30th May 1941.	46″×2/4 yards. (*Gadag Mills.*) Warp—28s. Weft—28s. Ends per inch 52. Picks per inch 48. Price per yd. 2½ as. Date of sale 30th May 1941.
12. Dhotis (Kavundapadi)	48″×2/4 yards. Warp—20s. Weft—20s. Ends per inch 48. Picks per inch 42. Price per piece 22 as. Date of sale 9th June 1941.	48″×2/4 yards. (*Vasanta Mills, Coimbatore.*) Warp—20s. Weft—20s. Ends per inch 48. Picks per inch 40. Price per piece 19½ as. Date of sale 9th June 1941.

APPENDIX XXIX—*contd.*

Table showing Handloom goods under competition from Mill products—contd.

Description.	Handloom.	Mill.
BOMBAY.		
13. Saris (coloured) (Dhulia)	45″×8 yards. 1½″ art. silk dobby border. Warp—20s. Weft—24s. Ends per inch 32. Picks per inch 48. Weight 64 tolas Price per piece 66 as. Date of sale 16th August 1941.	48″×8 yards. (*New Prawn Mills, Dhulia.*) 1½″ two-fold cotton mercerised dobby border. Warp—24s. Weft—32s. Ends per inch 40. Picks per inch 40. Weight 60 tolas. Price per piece 56 as. Date of sale 16th August 1941.
14. Saris (coloured) (Sholapur)	42″×7½ yards. 3½″ Ilkal border with art. silk. Plain heading 15″ with art. silk. Warp—20s. Weft—20s. Ends per inch 36. Picks per inch 48. Weight 77 tolas. Price per piece 64 as. Date of sale 16th August 1941.	42″×8 yards. (*Sholapur Spinning and Weaving Co., Ltd., Pancharan.*) 3″ imitation ilkal border with cotton. 7″ plain heading with cotton. Warp—20s. Weft—18s. Ends per inch 36. Picks per inch 32 Weight 64½ tolas. Price per piece 46 as. Date of sale 16th August 1941.
15 Saris (Malegaon) . .	45″×8½ yards. 1½″ Maheswari border. Warp—40s. Weft—60s. Ends per inch 48. Picks per inch 56. Weight 1 lb. 6 oz. Price per piece 56 as. Cost of preparation 3½ as. Cost of weaving 7 as. Date of sale 15th June 1941.	45″×8½ yards. (*Sholapur Small scale powerloom.*) 1½″ art. silk fancy dobby border. Warp—40s. Weft—60s. Ends per inch 44. Picks per inch 50. Weight 1 lb. 4 oz. Price per piece 50 as. Cost of preparation 9 as. Cost of weaving 4 as. Date of sale 15th June 1941.
BIHAR.		
16. Dhotis	44″×4½ yards. Warp—20s. Weft—30s. Ends per inch 44. Picks per inch 48. Price per piece 23 as. Date of sale 2nd July 1941.	41″×5 yards. (Baroda Cotton Mills.) Warp—18s. Weft—28s. Ends per inch 44. Picks per inch 40. Price per piece 19 as. Date of sale 2nd July 1941.

APPENDIX XXIX—*contd.*

Table showing Handloom goods under competition from Mill products—contd.

Description.	Handloom.	Mill.
BIHAR—*contd.*		
17. Striped shirtings . .	33″ × 12 yards. Warp—14½s. Weft—16½s (double). Ends per inch 44. Picks per inch 32. Price per yd. 5 as. Date of sale 2nd July 1941.	29″ × 24 yards. (*Birla Cotton Mills Delhi.*) Warp—18s (approximate). Weft—22s (approximate). Ends per inch 40 (double). Picks per inch 28. Price per yd. 4 as. Date of sale 4th July 1941.
UNITED PROVINCES.		
18. Dhotis	44″ × 5 yards. Weight per sq. yd. 3 oz. Ends per inch 42. Picks per inch 40. Price per piece 16 as. Date of sale 20th June 1941.	44″ × 5 yards. Weight per sq. yd. 3 oz. Ends per inch 44. Picks per inch 36. Price per piece 18 as. Date of sale 20th June 1941.
19. Dhotis	44″ × 5 yards. Weight per sq. yd. 3 oz. Ends per inch 56. Picks per inch 45. Price per piece 16 as. Date of sale 20th June 1941. NOTE.—No other details have been supplied.	44″ × 5 yards. Weight per sq. yd. 4 oz. Ends per inch 46. Picks per inch 42. Price per piece 14½ as. Date of sale 20th June 1941.
CENTRAL PROVINCES.		
20. Saris	42″ × 8 yards. Price per piece 40 as. Date of sale 13th May 1941.	43″ × 7¼ yards. Price per piece 30 as. Date of sale 13th May 1941.
21. Sari (with gold thread)	50″ × 9½ yards. Price per piece 116 as. Date of sale 13th May 1941.	*Small scale powerlooms.* 48″ × 9 yards. Price per piece 88 as. Date of sale 13th May 1941.
22. Saris	50″ × 9½ yards. Price per piece 64 as. Date of sale 13th May 1941. NOTE.—No other details supplied.	*Small scale powerlooms.* 48″ × 9 yards. Price per piece 56 as. Date of sale 13th May 1941.
BENGAL.		
23. Saris	44″ × 5 yards. Plain border 2½″. Warp—40s (dyed). Weft—40s (dyed). Ends per inch 50. Picks per inch 50. Weight 37 tolas. Price per piece 26 as. Date of sale 18th June 1941.	44″ × 5 yards. (*Geeta Brand Bangasri Cotton Mills.*) Plain border 2½″. Warp—40s (grey). Weft—40s (dyed). Ends per inch 46. Picks per inch 36. Weight 38 tolas. Price per piece 23½ as. Date of sale 18th June 1941.

APPENDIX XXIX—*contd.*

Table showing Handloom goods under competition from Mill products—contd.

Description.	Handloom.	Mill.
BENGAL—*contd.*		
24. Dhotis	44″×5 yards. Warp—40s. Weft—40s. Ends per inch 50. Picks per inch 54. Weight 32½ tolas. Price per piece 20 as. Date of sale 18th June 1941.	44″×10 yards. (*Bangasri Cotton Mills.*) Warp—24s (approximate). Weft—32s (approximate). Ends per inch 56. Picks per inch 44. Weight 41 tolas. Price per piece 19 as. Date of sale 18th June 1941.
25. Dobby border, grey Chaddars.	50″×3 yards. Warp—2/20s. Weft—10½s. Ends per inch 32. Picks per inch 32. Weight 48½ tolas. Price per piece 16 as. Date of sale 18th June 1941.	45″×3 yards. Warp—8s. Weft—12s. Ends per inch 32. Picks per inch 34. Weight 56½ tolas. Price per piece 12 as. Date of sale 18th June 1941.
26. Sari (Patna) . .	45″×5 yards. Warp—40s. Weft—40s. Ends per inch 56. Picks per inch 52. Weight 32 tolas. Price per piece 40 as. Date of sale 26th October 1941.	45″×5 yards. (*Vidyasagar Cotton Mills, Sodepur.*) Warp—40s (approximate). Weft—40s (approximate). Ends per inch 60. Picks per inch 58. Weight 30½ tolas. Price per piece 34 as. Date of sale 26th October 1941.
27. Sari (Narayanganj) .	44″×5 yards. (Mill-finished). Warp—40s. Weft—40s. Ends per inch 56. Picks per inch 54. Weight 28¼ tolas. Price per piece 26½ as. Date of sale 30th March 1941.	44″×5 yards. (*Sushila Brand Hooghly Cotton Mills, Co., Serampore.*) Warp—40s (approximate). Weft 40s (approximate). Ends per inch 56. Picks per inch 48. Weight 36½ tolas. Price per piece 25¼ as. Date of sale 30th March 1941.
28. Dhoti (Bankura) . .	45″×5 yards. Warp—40s. Weft—40s. Ends per inch 56. Picks per inch 52. Weight 31½ tolas. Price per piece 21 as. Date of sale 30th March 1941.	44″×5 yards. Warp—24s (approximate). Weft—32s (approximate). Ends per inch 56. Picks per inch 44. Weight 41 tolas. Price per piece 19 as. Date of sale 30th March 1941.
29. Towel	22″×42″. Warp—2/20s. Weft—10½s. Ends per inch 40. Picks per inch 36. Weight 7½ tolas. Price per piece 5½ as Date of sale 30th March 1941.	26″×42″. Warp—2/20s. Weft—20s (2/3 per pick). Ends per inch 40. Picks per inch 33. Weight 11 tolas. Price per piece 7 as. Date of sale 30th March 1941. (The mill-made towel is 4″ wider and is bleached.)

APPENDIX XXIX—*contd.*

Table showing Handloom goods under competition from Mill products—contd.

Description.	Handloom.	Mill.
BENGAL—*contd.*		
30. Coloured and check Chaddar.	54″ × 2⅞ yards. Warp—32s Weft—32s. Ends per inch 56. Picks per inch 44 Weight 33 tolas. Price per piece 32 as. Date of sale 30th March 1941.	51″ × 3 yards. Warp—32s. Weft—32s (approximate). Ends per inch 56. Picks per inch 58. Weight 37½ tolas. Price per piece 25 as. Date of sale 30th March 1941.
31. Bleached sari (Santipur) .	47″ × 5½ yards. Jacquard border 200s 3½″. Warp—90s. Weft—80s. Ends per inch 80. Picks per inch 80. Price per piece 60 as. Date of sale 26th October 1941.	45″ × 5½ yards. (*Ramakrishna Mills, Ahmedabad.*) Jacquard border 200s 3½″. Warp—80s. Weft—70s. Ends per inch 68. Picks per inch 56. Price per piece 53 as. Date of sale 26th October 1941.
32. Mosquito netting Mockleno cloth (Midnapore).	36″ × 1 yd. (grey). Warp—2/64s. Weft—2/64s. Ends per inch 40. Picks per inch 28. Price per yd. 4 as. Date of sale 26th October 1941.	42″ × 1 yard (bleached). Warp—32s (approximate). Weft—32s (approximate). Ends per inch 40. Picks per inch 36. Price per yd. 3½ as. Date of sale 26th October 1941.
33. Furnishing cloth . .	19½″ × 2¾ yards. Warp—2/42s. Weft—22s. Ends per inch 44. Picks per inch 38. Weight 13 tolas per yard. Price per yd. 12 as. Date of sale 26th October 1941.	45″ × 1 yard. Warp—40s (approximate). Weft—32s (approximate). Ends per inch 64. Picks per inch 56. Weight 13¼ tolas per yd. Price per yd. 12 as. Date of sale 26th October 1941.
34. Teapoy cover (Dum Dum)	36″ × 36″. Warp—2/40s. Weft—2/40s. Ends per inch 68. Picks per inch 56. Weight 9 tolas. Price per piece 14 as. Date of sale 26th October 1941.	36″ × 36″. Warp—2/20s. Weft—2/20s. Ends per inch 44. Picks per inch 40 Weight 15½ tolas. Price per piece 19 as. Date of sale 26th October 1941.
35. Gauze cloth . .	36″ × 3 yards. Warp—40s. Weft—40s. Ends per inch 36. Picks per inch 28. Price per yd. 1¼ as. Date of sale 26th October 1941.	37½″ × 3 yards. (*Mahalaxmi Cotton Mills.*) Warp—60s. Weft—60s. Ends per inch 48. Picks per inch 36. Price per yd. 2 as. Date of sale 26th October 1941.

APPENDIX XXIX—*contd.*

***Table showing Handloom goods under competition from Mill products*—contd.**

Description.	Handloom.	Mill.
BENGAL—*concld.*		
36. Bandage cloth . .	52″×3 yards. Warp—40s. Weft—40s. Ends per inch 30. Picks per inch 30. Weight 8 tolas. Price per yd. 1½ as. Date of sale 26th October 1941.	46″×2½ yards. (*Mahalaxmi Cotton Mills.*) Warp—25s. Weft—18s. Ends per inch 60. Picks per inch 30. Weight 20½ tolas. Price per yd. 2¾ as. Date of sale 26th October 1941.
37. Lungi (Nalta) . .	43½″×2½ yards. Warp—40s. Weft—40s. Ends per inch 68. Picks per inch 68. Weight 17½ tolas. Price per piece 16 as. Date of sale 26th October 1941.	41″×2½ yards. (*Sholapur Mills.*) Warp—24s. Weft—20s. Ends per inch 68. Picks per inch 48. Weight 29 tolas. Price per piece 24 as. Date of sale 26th October 1941.
UNITED PROVINCES.		
38. Coating . . .	28″. Warp—20⅛s (double). Weft—20⅛s (double). Ends per inch 40. Picks per inch 30. Price per yd. 6½ as. Date of sale 20th June 1941.	27″. Warp—20⅛s (double). Weft—20⅛s (double). Ends per inch 56. Picks per inch 44. Price per yd. 7 as. Date of sale 20th June 1941.
39. Coating . . .	27″. Warp—2/42s (mercerised cotton). 2/40 (staple yarn). Weft—2/42s (mercerised cotton). 2/40 (staple yarn). Ends per inch 42. Picks per inch 30. Price per yd. 8¾ as. Date of sale 20th June 1941.	27″. Warp—2/42s (mercerised cotton). 2/30s (staple yarn). Weft—2/30s (staple yarn). 2/42s (mercerised cotton). Ends per inch 46. Picks per inch 50. Price per yard 14 as. Date of sale 20th June 1941.
40. Coating . . .	27″. Warp—60/2 (staple yarn.) Weft—Fancy yarn. Ends per inch 48. Picks per inch 36. Price per yd. 10 as. Date of sale 20th June 1941.	27″. Warp—2/40s. Weft—Fancy yarn. Ends per inch 74. Picks per inch 48. Price per yd. 14 as. Date of sale 20th June 1941.
41. Checked shirting . .	27″. Warp—40s. Weft—40s. Ends per inch 50. Picks per inch 48. Price per yd. 3 as. Date of sale 20th June 1941.	44″. Warp—80s. Weft—80s. Ends per inch 66. Picks per inch 52. Price per yd. 7 as. Date of sale 20th June 1941.

APPENDIX XXIX—*concld.*

Table showing Handloom goods under competition from Mill products—concld.

Description.	Handloom.	Mill.
UNITED PROVINCES—*contd.*		
42. Printed yarn shirting	30". Warp—2/60s. Weft—2/60s. Ends per inch 58. Picks per inch 52. Price per yd. 5½ as. Date of sale 20th June 1941.	28". Warp—40s. Weft—40s. Ends per inch 82. Picks per inch 50. Price per yd. 5½ as. Date of sale 20th June 1941.
BOMBAY.		
43. Saris (Ahmednagar)	45" to 48" × 8 yds. Yarns :—20s, 30s, 40s two ply both for warp and weft. Ends per inch 38 to 44. Picks per inch 40 to 48. Selling price per sari Rs. 2-12-0 to Rs. 3-0-0.	45" to 48" × 8 yards. (*Pratap Mills, Dhulia.*) Yarns :—20s, 30s, and 40s two ply both for warp and weft. Ends per inch 38 to 44. Picks per inch 40 to 48. Selling price per sari Rs. 2-4-0 to Rs. 2-8-0.
44. Saris (Sangamner)	48" to 49" × 8½ yds. Yarns :—30s and 40s. Ends per inch 40 to 48. Picks per inch 50 to 60. Selling price per sari Rs. 3-8-0 to Rs. 3-12-0.	48" to 49" × 8½ yards. (*Chaliagaon Mills.*) Yarns :—30s and 40s. Ends per inch 40 to 48. Picks per inch 50 to 60. Selling price per sari Rs. 3-2-0 to Rs. 3-8-0.
45. Saris (Sholapur)	46" to 48" × 8 yds. Yarns :—20s and 30s. Ends per inch 32 to 40. Picks per inch 40 to 50. Selling price per sari Rs. 2-0-0 to Rs. 2-4-0.	46" to 48" × 8 yards. (*Morarji Gokuldas Mills.*) Yarns :—20s and 30s. Picks per inch 40 to 50. Ends per inch 32 to 40. Selling price per sari Rs. 1-10-0 to Rs. 1-14-0.

APPENDIX XXX.

A Note on Small-scale Powerloom Factories.

In these factories weaving is done by powerlooms and the yarn is generally prepared by the improved appliances prevalent among the handloom weavers. No sized warp is used and invariably in all cases two-fold yarn is used for the warp. Yarn is purchased from the market in bundle form and is wound on *charkhas* by hand. Then the warp is made out of a sectional warping mill with beaming arrangements and then the yarn is transferred on to the weavers' beams for the loom. The difficult process of sizing which takes more time has been avoided. There are cases where attempts are being made to use single yarn after sizing, but sizing is ordinarily done on hanks before winding. The looms are generally bought second-hand. We have been told that the weavers are paid on a monthly basis of Rs. 9 to Rs. 15 per month. The capital outlay is small and the overhead charges are negligible. The power is bought from the local electricity company. We have been supplied with approximate figures for the daily expenditure incurred in a factory containing 4 second-hand powerlooms. The factory has a total outlay of Rs. 1,500 for the 4 powerlooms and a 3 horse power electric motor. We quote the figures below :—

Expenditure per day.

1. Depreciation at 10 per cent. on Rs. 1,500	6·60 as.
2. Interest on capital at 6¼ per cent. on Rs. 1,500	4·08 as.
3. Interest on working capital at 6¼ per cent. (working capital being taken as equal to the block)	4·08 as.
4. Rents for the building	8·00 as.
5. Taxes	2·00 as.
6. Power (electric current charges at 24 units per day including lighting charges at 1 anna per unit)	24·00 as.
7. Stores	16·00 as.
Establishment :—	
8. 1 warper at Rs. 7-8-0 per month	4·00 as.
9. 4 weavers at Rs. 9 per month	18·95 as.
10. Supervisor at Rs. 37-8-0 per month	20·00 as.
11. Miscellaneous contingencies and reserves	4·00 as.
	111·71 as. per day.

The owner pays at the rate of 3 pies per knot for winding of the warp and weft, and it comes to 14 annas per day. The daily production is as under :—

Type of cloth.	Weight.	Dimensions.	Reed and Pick.	Counts.	Daily production.
Coatings	11 lbs.	28"×24 yds.	44R×36P	2/25s×2/20s	78 yds.
Shirtings	4¼ lbs.	31"×24 yds.	72R×64P	2/64s×28s	42 yds.
Shirtings	4⅛ lbs.	31"×24 yds.	72R×64P	2/64s×2/64s	42 yds.

The manufacturing charges work out to 10½ annas per piece of coating and at Rs. 1-2-0 per piece of shirting.

APPENDIX XXX—*contd.*

In the Provinces of Bombay and Central Provinces and Berar, such powerlooms are engaged in manufacturing saris and a typical example for each Province is given below. It would appear that the powerloom can turn out from four to five times as much output per day as a handloom :—

Province.	Mode of manufacture.	Description.	Dimension and weight.	Counts of warp and weft.	Cost of yarn (as.).	Cost of dyeing (as.).	Cost of preparation (as.).	Cost of weaving (as.).	Total cost (as.).	Time taken Hours.
Bombay	Handloom .	Sari .	45" × 8½ yds. (1 lb. 6 oz.)	40s × 60s	32·50	2·50	6·00	7·00	48	12
	Powerloom .	Do. .	45" × 8½ yds. (1 lb. 4 oz.)	40s × 60s	31·00	2·50	6·50	4·00	44	3
C. P. and Berar.	Handloom .	Do. .	50" × 8½ yds. (1 lb. 7 oz.)	40s × 40s 44R × 48P	25·00	8·00	5·00	10·00	48	16
	Powerloom .	Do. .	50" × 9 yds. (1 lb. 2¼ oz.)	52s × 52s 52R × 52P	28·00	6·00	4·00	8·00	46	3

APPENDIX XXXI.

Statement showing the price of cloth realised by the weaver and by the middleman and the price paid by the consumer.

Province or State.	Article	Price at which the weaver sells (in annas).	Price realised by the middleman (in annas).	Percentage profit earned by the middleman.	Retail price paid by the consumer (in annas).	Increase percentage on the price realised by the weaver.
1	2	3	4	5	6	7
Assam	Check Table cloth 48" × 48" 2/20s × 2/20s	23·5	25	6·4	27	14·9
	Screen 48" × 1 yd. 2/20s × 2/20s	14	15	7·1	16	14·2
Bengal	Coloured sari 45" × 5 yds. 2/84s × 60s	34·25	36	5·1	37	
	Coloured sari 45" × 5 yds. 40s × 40s	21	22·5	7·1	23·5	11·9
	Sari 48" × 5½ yds. 80s × 80s	48	52	8·3	56	16·7
	Dhoti (fancy) 48" × 5½ yds. 120s × 120s	76	76	..	80	5·3
	Lungi 39" × 1½ yds. 40s × 28s	5·5	7	27·3	7·5	36·4
	Lungi 36" × 2¼ yds. 40s × 40s	7·5	9·0	20·0	9·5	26·7
	Dhoti (grey) 45" × 5 yds. 40s × 40s	16·75	18·25	9·0	19	13·4
Bihar	Motia cloth 30" × 20 yds. 16⅛s × 13⅛s	56	64	14·3	..	..
Bombay	Sari 45" × 8¼ yds. 20s × 30s	34	37	8·8	40	17·6
	Bijapur sari 42" × 7 yds. 20s × 20s	39	41	5·1	46	18·0
	Sholapur sari 44" × 8¼ yds. 30s × 30s	30	32	6·7	35	16·7
	Ilkal sari 44" × 8 yds. 60s × 60s	74	78	8·1	82	16·2
	Khans 30" × 21 yds. 32s × 32s	96	100	4·2	106	10·4
	Khans (art. silk border). 30" × 21 yds. 32s × 32s	101	108	6·9	120	18·8
C. P. and Berar	Mercerised patta kinar. 50" × 9 yds. 70s × 70s	60	68	13·3	68	13·3

APPENDIX XXXI—*contd.*

Statement showing the price of cloth realised by the weaver and by the middleman and the price paid by the consumer—contd.

Province or State.	Article.	Price at which the weaver sells (in annas).	Price realised by the middleman (in annas).	Percentage profit earned by the middleman.	Retail price paid by the consumer (in annas).	Increase percentage on the price realised by the weaver.
1	2	3	4	5	6	7
C. P. and Berar—*contd.*	Silk and jari border sari. 50" × 9 yds. 70s × 70s	200	224	12	224	12
	Mercerised kinar border plain dhoti. 52" × 9 yds. 70s × 70s	54	61	13·0	61	13·0
	Silk border dhoti 50" × 5½ yds. 60s × 70s	104	114	9·6	114	9·6
	Silk bordered dhoti 50" × 5½ yds. 60s × 70s	116	126	8·6	126	8·6
	Jari bordered Uparna. 50" × 2½ yds. 80s × 80s	28	30	7·1	30	7·1
	Bordered cotton sari 46" × 6½ yds. 20s × 20s	24	26	8·3	26	8·3
Madras . .	Dhotis . . . 54" × 8 yds. 60s × 60s	42	44	4·8	48	14·3
	Dhotis . . . 52" × 4 yds. 60s × 60s	20	22	10·0	24	20·0
	Dhotis . . . 52" × 4 yds. 80s × 80s	30	32	6·7	34	13·3
	Shirtings . . 45" × 15 yds. 20s × 20s	56	60	7·1	64	14·3
	Saris . . . 45" × 7 yds. 60s × 60s	48	52	8·3	54	12·5
	Saris . . . 45" × 8 yds. 40s × 40s	48	50	4·2	52	8·3
	Shirtings . . 32" × 105 yds. 20s × 20s	251·25	258	2·7	304	21·0
Orissa . .	Dhoti (blue border) 47" × 4½ yds. 40s × 40s	17·75	19·75	11·3	21	18·5
	Blue lungi . . 48" × 2½ yds. 40s × 40s	12·25	13·75	12·2	15·6	26·5
	Light green fine sari 46" × 5 yds. 40s × 40s	29·25	33	12·8	37	26·5
	Sari (Kumbha bordered). 42" × 6½ yds. 2/40s × 11s	51·5	59	14·6	59	14·6

APPENDIX XXXI—*concld.*

***Statement** showing the price of cloth realised by the weaver and by the middleman and the price paid by the consumer*—concld.

Province or State.	Article.	Price at which weaver sells (in annas).	Price realised by the middleman (in annas).	Percentage profit earned by the middleman.	Retail price paid by the consumer (in annas).	Increase percentage on the price realised by the weaver.
1	2	3	4	5	6	7
Orissa—*concld.*	Bandage cloth 36" × 10 yds. 40s × 26s	16·25	20	23·1	20	23·1
Punjab	Shirting (mercerised) 28" × 1 yd. 64/2s × 64/2s	7·7	8	4·4	8·5	10·9
	Lungi 45" × 3 yds. 60/2s × 60/2s	21	22·5	7·1	24	14·3
	Suti cotton (mercerised). 27/28" × 16 yds. 64s × 64s	113·3	136	20·0	152	34·1
	Khes 27" × 11 yds. 14½s × 14½s	90·75	101 75	12·1	110	21·2
	Curtain cloth 54" × 40 yds. 20½s × 20½s	400	520	30·0	560	40·9
Sind	Susi 23" × 18 yds. 40s × 40s	70	80	5·3	90	15·4
United Provinces	Garha 44" × 12½ yds. 20s × 16s	31·25	34·38	10·0	43·75	40·0
	Shirting 30" × 12 yds. 30s × 40s	48	60	25	68	41·7
Baroda	Khaddar 30" × 12 yds.	58	62	6·9	64 to 68	13·8
	Scarf 54" × 3 yds.	14	15	7·1	16	14·2
Cochin	Thorthus 30" × 1½ yds. 2/20s × 2/20s	2·75	3·0	9·1	3·5	27·3
Hyderabad	Silk sari 45" × 6½ yds.	243·75	288	18·1	324	32·9
	Cotton sari 42" × 8½ yds. 22s × 22s	21·8	32	46·6	36	64·8
	Cotton sari 45" × 8 yds. 40s × 40s	34·5	38	10·1	42·f	23·2
Kolhapur and Deccan States.	Khan 50" × 9 yds. 40s × 60s	40	45	12·5	48	20·0
	Coloured sari 50" × 9 yds. 25s × 25s	64	68	6·3	72	12·5
Mysore	Sari (silk) 42" × 9 yds.	367	368	0·3	384 to 400	4·8

The average percentage of profit earned by the middleman . . . . . 11·1
The average percentage over the price paid by the consumer . . . . 16·6

APPENDIX XXXII.

QUESTIONNAIRE

Fact-Finding Committee (Handloom and Mills).

NOTES.

(1) Please confine your answers to matters with which you are directly acquainted and on which you are in a position to supply the Committee with detailed evidence.

(2) Answers should refer to some definite area, which should be clearly specified in each case, such as Town, District, Province or State, British India, or India as a whole.

(3) In answering questions, the conditions before the outbreak of the present war may kindly be given. Please mention also what changes have happened after the war began.

(4) Attached to some of the questions are certain tables involving the collection of statistical data. It is important that the figures entered in those tables should be accurate. In case such statistics are not available, you may answer those questions by giving details and percentages.

(5) Please begin your replies after carefully making the following entries :—

(i) Name and address of person, institution or Government replying to the Questionnaire———————————————————————

(ii) Area with reference to which the replies are given———————————————————

(6) Replies to the Questionnaire (with five spare copies), along with memoranda, if any, should reach the Secretary, Fact-Finding Committee (Handloom and Mills), Government of India (Camp), Ootacamund, not later than 7th June 1941.

SECTION I.

1. Please give a short account of the handloom weaving industry in your area, mentioning, in particular, the principal centres of the industry, the lines of production in each centre, and the peculiarities of technique (if any).

2. In what way has the handloom weaving in your area fared in the last few years? Indicate in general the causes of the advance or decline.

3. Has any survey of the handloom industry in your area been carried out? If so, please explain fully the method of enquiry and indicate the extent of reliability of the data collected.

SECTION II.

4. What is the total number of handlooms in your area? Please give a statement, classifying them as in Table I-A.

5. What proportion of the handlooms are found in the cottages and what proportion in *karkhanas* or small factories? Please give a statement as in Table I-B.

6. What proportion of the handlooms are engaged in weaving cotton, silk, art. silk, wool, jute or other fibre and mixtures thereof? Please give a statement as in Table I-C.

7. How many looms in your area are confined to handspun cotton yarn? Are there any indications to show that the number of such handlooms is increasing or likely to increase?

8. What proportion of the looms of each category remain idle (*a*) the whole year round, (*b*) for some months of the year (which months)? Give the causes of this idleness and bring out its consequences. Have any of the idle looms been discarded?

9. If there are any powerlooms (other than mills) in your area, please state their number, classify them and enter those figures in Table I-B and Table I-C. How many looms are attended to by each operative?

10. How many of these powerlooms are owned or operated by those who were previously handloom weavers?

11 How has the handloom weaver been affected by the introduction of powerlooms? Has the number of handlooms diminished since?

SECTION III.

12. Give the total number of weavers in your area, classified as in Table II.

Specify in the table, the number of (*a*) weavers who work on their own account, (*b*) those employed by a master-weaver or *mahajan*, although working in their own homes, (*c*) those working in *karkhanas* or handloom factories and (*d*) those attached to a co-operative society.

13. How many or what proportion of the weavers in your area are master-weavers ? Please explain the relationship (social and economic) between those and the ordinary weavers.

14. (*a*) What are the classes or castes in your area that regard handloom weaving as their hereditary occupation ?

(*b*) Have other classes of people taken up handloom weaving recently ? If so, how has this influx affected the industry ?

15. What proportion of the weavers in your area regard weaving as their part-time occupation ? What are the subsidiary occupations followed along with weaving ? How far is weaving a subsidiary occupation to agriculturists ?

16. Is there any guild organisation among weavers ? If so, give details. What is the influence of the guild on the industry in general ?

17. Are the handloom weavers in your area addicted to habits like gambling, drinking, etc. ?

18 What is the state of indebtedness among the handloom weavers in your area ? Why do th borrow ? Explain the nature of the usual transactions.

19 (*a*) If any weavers of the hereditary weaving castes have abandoned weaving, how many or what proportion of them have done so, and what other occupations have they entered ?

(*b*) To what extent have handloom weavers found employment in the textile mills ? Have they any disinclination for working in mills ?

Section IV.

20. (*a*) Please give in tabular form, the total production of cloth on handlooms, classified under the various categories, as in Table III-A.

(*b*) Please classify the same also according to the counts of yarn used, as in Table III-B.

(*c*) Please give similar details in regard to the production on powerlooms (other than mills) using Table III-A.

21. What is the normal output of a handloom in your area ? Please give details, in respect of certain standard cloths, as in Table III-C.

22. How is the total production of handloom cloth in India usually estimated ?

Please comment on the following methods of estimating the production of cloth :—

(*a*) The assumption that, in handloom production, 1 lb. of yarn will give 4 yards of cloth.

(*b*) The assumption that, in mill production, 1 lb. of yarn will give 4·78 yards of cloth.

(*c*) The assumption that 100 lbs. of yarn will on the average give 112 lbs. of mill cloth.

(*d*) The assumption that on the average 1 lb. of mill cloth will correspond to 4·27 yards.

(*e*) The assumption that the quantity of mill yarn used for purposes other than mill and handloom weaving may be offset against the quantity of handspun yarn used in the handlocms.

(*f*) The assumption that the mill yarn used for such purposes as hosiery, braid, ropery, nets, lampwicks, bandages, pyjama cords, etc., corresponds to 10 per cent. of the total mill yarn produced.

(*g*) The assumption that the total production of handspun yarn amounts to 24 million pounds.

Have you any further comments to make regarding the statistical methods employed in such computations ?

23. What proportion of the extra mill consumption of yarn in your area is by single-unit powerlooms and small-scale powerloom factories, which do not come under the Factory Acts ? What allowance would you make for this in all-India figures ?

24. Has there been any change in the lines of production on the handloom in your area ? Explain if any shifts have taken place from one group of counts to another, from one kind of cloth to another, or from one type of textile to another. What have been the effects of changes in fashion ?

25. Has (*a*) the *Swadeshi* movement, and (*b*) the emphasis on hand-spinning brought about any changes in the handloom industry ?

26. Please enumerate the principal types of cloth woven on handlooms in your area and forward six sets of samples of not less than 12" square each. Please give details about these as in Table III-D.

27. (a) The handloom, it is said, possesses a special field in certain coloured styles of cloth. Is this true ? Please enumerate the principal types of such cloth and show why handlooms have an advantage.

(b) Consider also the defects of handloom production.

SECTION V.

28. Please give details of the different preparatory processes as they are going on in your area :—

(a) The form in which the yarn is received.

(b) Winding on the bobbins before warping.

(c) Sizing.

(d) Warping.

(e) Reaming, twisting and drawing in.

(f) The percentage of yarn wasted in the course of preparation.

29. (a) What time is taken at each stage in preparing a warp of normal size, and how many persons are engaged ? What wages are paid to those who assist the weaver ?

(b) Do the weavers wind their weft themselves ? If not, what wages are paid to those who help ?

(c) Is there any organisation in your area from which prepared warp of a desired length ready for the loom could be obtained ? If so, is it working satisfactorily ?

(d) Has the method of hand-sizing any superiority over that of slasher-sizing, for example with regard to the " feel " of the cloth ? Is there any slasher-sizing machine for sizing the warp in use in your area ? If not, do you think an installation of such a machine in your area will be beneficial to the industry ?

30. (a) What sources, if any, exist in your area for supplying new designs to the handloom weavers ?

(b) If not, how do the weavers manage to keep themselves in touch with up-to-date marketable designs ?

31. Are the weavers in your area agreeable to the adoption of improved appliances and accessories ? If not, please state the reasons.

32. To what extent do handloom products require finishing ? Are there any arrangements in your area for the finishing of handloom fabrics ?

33. Would it be economical and practical to instal a finishing plant for a district or a group of districts so as to cater for, say, 1,000 looms and what would be the benefits of such a plant to the handloom industry in general ?

34. (a) It is said that owing to competition among handloom weavers, the quality of handloom products has not been uniformly maintained. Has this led to any deterioration in the handloom industry ?

(b) Is there any standardization of handloom cloth in your area ? If not, how has this affected the handloom industry ?

SECTION VI.

35. What are the various systems of handloom weaving organisation prevalent in your area ? Please treat them under the following heads and explain how they work :—

(i) The independent cottage system (weaver working on his own account).

(ii) The commission agency system, wherein the weaver works in his own house for master-weavers or *mahajans*, receiving yarn on credit and repaying in the form of money or cloth.

(iii) The handloom *karkhana* system, in which a master-weaver or *mahajan* employs weavers on a wage basis in handloom establishments (often called factories).

(iv) The co-operative system wherein the weavers are organised on a co-operative basis for purchase of raw materials, production of cloth and its sale.

(v) Any other system prevailing in your area.

36. In the case of each of these systems, please explain how the weaver is remunerated, what his daily and monthly earnings are, and what his general economic condition is.

37. What are the busy and slack seasons in the handloom industry of your area ? In the case of each please give details of the extent and regularity of employment, as in Table IV

38. What are the functions performed by (*a*) master-weavers and (*b*) other middlemen ? Bring out the distinctive advantages and disadvantages of each.

39. (*a*) What are the advantages of a handloom weaving *karkhana* ? What is the optimum or most economical size of such an establishment ? Mention the approximate capital expenditure. What percentage of the workers in these establishments are weavers by caste ?

(*b*) Give similar details about the small-scale powerloom factory, if any, in your area.

40. Give a short account of the growth of weavers' co-operative societies in your area, and explain the working of some of them, stressing in particular the financial and marketing aspects. What proportion of the weavers of your area have joined these societies ?

SECTION VII.

41. (*a*) Please enumerate the kinds of yarn used (i) for handlooms of various types and (ii) for powerlooms (other than mills). Use Table V-A for both.

(*b*) Mention the sources of supply in the case of each kind of yarn.

42. Please explain how yarn is bought by handloom weavers. Is yarn bought on cash or credit ? When yarn is bought on credit, how and when is the payment made ? Is it necessary to pledge the cloths against the price of yarn supplied by the dealer ? If so, on what terms ? Please state the rate of interest ordinarily charged.

43. Does the yarn-dealer charge a higher price for yarn and later give any rebate, if the cloth is sold to him only ? It is alleged that the arrear account is never squared up. Is this true ? If not, please state the reasons.

44. If you consider the handloom weavers to be at any disadvantage in respect of the price of yarn, what approximately is its influence on the cost of production ?

45. (*a*) In what form do the handloom weavers in your area purchase their yarn—(bundles, cones, cheeses, ball warps, beams) ? Please discuss the advantages and disadvantages of each form, and explain how far it is practicable to supply the yarn to the weaver in a balled warp form.

(*b*) When the yarns do not require to be dyed or sized, would it be more convenient if the yarn is supplied on cones ?

(*c*) Would weavers consider it more convenient if the weft yarn is supplied on cones or cheeses, rather than on bundles ?

46. Please enumerate, with the names and location of the mills, the different tickets or brands of yarn of the counts ordinarily used for the bulk production of handwoven goods in your area, and side by side give the prices prevailing on or about certain given dates in the principal handloom weaving centres, as in Table V-B.

47. What proportion of the total quantity of yarn spun in mills in your area or group is available for consumption by the handloom weavers ?

48. What is the existing organisation for the marketing of yarn ? Explain the part played by :—

(i) Agents,

(ii) Sub-Agents,

(iii) Yarn merchants,

(iv) Other middlemen, if any.

49. (*a*) Has any attempt or offer been made to supply yarn to the handloom weavers directly from the mills ? Please discuss the feasibility of such a method.

(*b*) Is there any provision in your area for the supply of yarn from yarn depots maintained by the State ? If so, explain how it works.

50. Are yarns required for handlooms bought on any specification with regard to the quality, strength and turns per inch ?

51. It is alleged that certain malpractices with regard to length, weight, packing, etc., exist in the yarn trade. Do such practices exist in your area ? If so, whom do you hold responsible and what steps would you suggest for their control and mitigation ?

52. Having regard to the large quantity of mill made yarn needed by the handloom weavers, you think that any special measures are necessary for securing an adequacy of yarn, of required counts and qualities, and at reasonable prices ? If so, who should carry out these measures ?

53. To what extent do the weavers in your area use dyed or bleached yarn ? How do they solve the problem of dyeing and bleaching ? Do the weavers buy dyed or bleached yarn or do they buy grey yarn and have it dyed or bleached later ? Are there any dyeing factories in your area ? If so, mention their terms.

54. What is the difference in price between (i) yarns bought dyed and (ii) yarns bought grey and dyed later ?

SECTION VIII.

55. What proportion of the handloom production in your area is :—

(*a*) For home use.

(*b*) For sale within the town or district.

(*c*) For sale outside the district but within India.

(*d*) For the export market.

56. What proportion of the weavers in your area produce against orders ? and what proportion sell their output in the near-by markets ? In the case of the latter, please explain the nature of the transaction. Are they at the mercy of the cloth-dealer ? Is there any agency in your area to give accommodation while the out-put is waiting to be marketed ?

57. Please explain the working of the retail trade in handloom cloth in your area. In the case of some specific pieces of cloth, please state (*a*) the price at which the weaver sells, (*b*) the price realised by the middlemen, and (*c*) the retail price paid by the consumers.

58. It has been stated that the transport of handloom cloth within India is subject to various handicaps. Are there any handicaps in your area ? Please deal in particular with the railways.

59. Is any handloom cloth exported to other countries from your area ? If so, what kinds of cloth ? By whom is the cloth exported and how do the exporters obtain their cloth ? Explain fully any difficulties that are encountered in the export markets and suggest measures for expanding the export trade.

60. What changes have taken place in the clothing used by men, women and children in your area during the last two or three decades ? In this matter, kindly consult experienced persons in the locality and also the account books of shopkeepers and tailors, if possible. In particular, state whether the use of handloom cloth has increased or diminished during the period.

61. Has the use of knitted goods (vests, sports-shirts, shawls, scarves, mufflers, etc.) increased in your area ? If so, how has it affected the demand for woven fabrics in general and handloom fabrics in particular ?

62. With reference to the principal shops in your area or town, can you estimate the proportion of the handwoven cloth to the total stock ? Has the proportion changed in recent years ?

63. Do the prices now realized on handloom cloth in your area represent a fair selling price ?

SECTION IX.

64. (*a*) What are the chief classes of cloth manufactured in the mills of your area (or of your group) ? In the case of each class, please state what proportion it bears to the total production.

(*b*) Please give information as in Question 64 (*a*), in regard to the products of powerlooms other than mills in your area. (Table III-D may be used.)

65. Please explain the marketing organisation for the sale of cloth produced in the mills.

66. Have you any evidence to show that (*a*) the mills, (*b*) single unit powerlooms and powerloom factories have encroached on the styles of goods produced on the handloom, or that handlooms have encroached on the goods produced in the mills and on other powerlooms ?

67. Please collect and forward six sets of samples, not less than 12" square, of typical classes of comparable cloths made in (*a*) mills, (*b*) powerlooms, and (*c*) handlooms, which in your opinion compete directly or indirectly with handloom products. In regard to each set of competing cloths, kindly give details as in Table VI.

68. Please classify the types of cloth in which there is competition, either direct or indirect, (*a*) between handlooms and mills, and (*b*) between handlooms and other powerlooms. For convenience, state the nature of competition under the following heads :—

(i) *Class (1)*—in which handlooms cannot, for one reason or another, compete with mills and powerlooms at present.

(ii) *Class (2)*—in which handlooms, and mills and powerlooms are almost on a par and where the competition is just equal.

(iii) *Class (3)*—in which handlooms are superior to mills and powerlooms.

(Comparable qualities of cloth may kindly be supplied in support of your view.)

69. Is there any unfair competition in the cloth trade between the handloom weavers on he one hand, and mills and small-scale powerloom establishments on the other ?

70. To what extent has improved transport facilitated the competition of mill cloth with handloom cloth, in your area ?

Section X.

71. Should the handloom confine itself to the production of certain special textures s h as artistic fabrics and other types which cannot be economically produced by the mills ? f you do not agree, give reasons.

72. Having regard to the present and prospective market at home and abroad, are there any special lines of production which the handloom weavers can take up with advantage ? If so, give full particulars.

73. Explain the nature of the existing organisation for assisting handloom weavers in your Province or State. What improvements in this organisation would you suggest ? Consider in particular—

(i) The supply of raw materials at a reasonable price to the handloom weavers.

(ii) The supply of designs to weavers.

(iii) Preparation of yarn, bleaching, dyeing, mercerising and finishing of cloth.

(iv) Standardization in production.

(v) Marketing facilities.

(vi) Technical guidance to weavers, and training of weaving apprentices.

(vii) Training of technical experts.

74. What, in your opinion, is the place of co-operation in the reorganisation of the handloom weaving industry ?

75. Please state how the schemes adopted in the provinces with the grants made by the Government of India for the development of handloom industry are working in your area.

76. Could you suggest any scheme whereby mills might be brought into more direct and intimate relationship with the handloom weavers to the advantage of both parties, in regard to distribution of yarn, finishing of cloth, exploring export markets, etc. ?

77. Fully state your views on the proposal contained in the fifth item of the Committee's terms of reference, namely, "an enactment prohibiting the mills from using yarns of low counts ".

If any restriction regarding lower counts is in your view desirable, at what counts would you draw the line of demarcation for such restriction ? Please discuss fully the merits and demerits of such a restriction if imposed.

What would be the effects of such a restriction on (*a*) the supply of yarn to the weavers and (*b*) indirect competition by cloth made out of slightly higher counts than those on which the restriction is imposed ?

TABLE I-A.

Total Number of Handlooms classified according to the type.

(*See* Question No. 4.)

———	Plain.	Dobby.	Jacquard.	Total.	Working or Idle.		Approximate Price of each type of Looms.
					Working.	Idle.	
Throw Shuttle Pit Looms.							
Fly Shuttle Pit Looms.							
Fly Shuttle Frame Looms.							
Hattersley Domestic Looms.							
Semi-Automatic Looms.							
Salvation Army Looms.							
Tape Looms.							
Any other kind of Looms.							

TABLE I-B.

Looms classified according to the unit of production.

(*See* Questions No. 5 and 9.)

	Number of Handlooms.							Number of Power-looms.
	Throw Shuttle Pit Looms.	Fly Shuttle Pit Looms.	Fly Shuttle Frame Looms.	Hattersley Looms.	Semi-Automatic Looms.	Other types of Hand-looms.	Total No. of Looms.	
I. *Operated in Cottages with 1 or 2 Looms*—								
(*a*) By independent weavers .								
(*b*) By weavers working for a master weaver or *mahajan*								
(*c*) Members of Co-operative Society . . .								
Total .								
II. *Karkhanas or factories*—								
(*a*) 3 to 10 Looms . .								
(*b*) 11 to 25 Looms . .								
(*c*) 26 Looms and above .								
Total .								
Grand Total .								

TABLE I-C.

Number of Looms classified according to the textile used.

(*See* Questions No. 6 and 9.)

———	Cotton.	Wool.	Silk.	Art silk.	Jute or any other fibre.	Mix-tures.	Total.
Throw Shuttle Pit Looms . . .							
Fly Shuttle Pit Looms.							
Fly Shuttle Frame Looms . . .							
Hattersley Looms .							
Semi-Automatic Looms.							
Other types of Hand-looms . . .							
Total .							
Powerlooms. . .							

TABLE II.

Number of Weavers.

(*See* Question No. 12.)

*Class.	Weavers (full time).	Weavers (part time).	Total number	†Number of Assistants.		Total number of Weavers and Assistants.	Dependants.
				Paid.	Unpaid.		
(*a*) Independent Weavers.							
(*b*) Working for a master weaver or *mahajan*.							
(*c*) Members of Co-operative Society.							
(*d*) Working in *Karkhanas* or handloom factories.							
(*e*) Working on Powerlooms (other than mills).							
Total							

* If a classification as in the table is not possible, you may classify them in such a way as to suit the actual condition in your Province or State.

† The term "assistants" includes workers from the weaver's family as well as paid labourers employed in any process of the handloom business.

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